

SEQUENCE LISTING

<110> SPECHT, THOMAS  
HINZMANN, BERND  
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PILARSKY, CHRISTIAN  
DAHL, EDGAR  
ROSENTHAL, ANDRE

<120> HUMAN NUCLEIC ACID SEQUENCES FROM NORMAL BREAST TISSUE

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<141> 2000-09-20

<150> PCT/DE99/00909

<151> 1999-03-19

<150> DE 198 13 835.0

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&lt;211&gt; 933

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 30

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&lt;211&gt; 2783

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 31

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&lt;211&gt; 3411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 32

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&lt;211&gt; 1393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 33

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&lt;210&gt; 34

&lt;211&gt; 1236

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 34

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&lt;210&gt; 35

&lt;211&gt; 749

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 35

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ggtgggggga tcacaaggtc actagatgg 749

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&lt;210&gt; 36

&lt;211&gt; 1251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 36

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&lt;210&gt; 37

&lt;211&gt; 3283

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 37

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&lt;210&gt; 38

&lt;211&gt; 2720

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 38

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&lt;210&gt; 39

&lt;211&gt; 1036

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 39

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&lt;210&gt; 40

&lt;211&gt; 2659

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 40

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&lt;400&gt; 41

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 45

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&lt;210&gt; 50

&lt;211&gt; 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 50

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<210> 51
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<212> DNA
<213> Homo sapiens

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<400> 51
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<210> 52

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<400> 52
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<210> 53
<211> 2262
<212> DNA
<213> Homo sapiens

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&lt;210&gt; 54

&lt;211&gt; 1301

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 54

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ttggccccc cttttttaaaa aaaaaaaaaa aaaaaaaaaa a 1301

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<210> 55

<400> 55

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<210> 56

<211> 1265

<212> DNA

<213> Homo sapiens

<400> 56

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<210> 57

<211> 274

<212> DNA

<213> Homo sapiens

<400> 57

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gcaaacagtc acaatatgca ttaggacgac tgacgatatt tcttacatgc cagggagttc 180
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agggattttt aaaaagtcaa aaacagtggc aggg 274

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<210> 58

<211> 2073

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<212> DNA
<213> Homo sapiens
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<400> 58

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<210> 59

<211> 850

<212> DNA

<213> Homo sapiens

<400> 59

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&lt;210&gt; 60

&lt;211&gt; 2091

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 60

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&lt;213&gt; Homo sapiens

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 68

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&lt;211&gt; 2419

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&lt;210&gt; 77

&lt;211&gt; 366

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 77

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Ile Ala Ser Ala Arg Leu Glu Glu Val Thr Gly Lys Leu Gln Val Ala
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Arg Asn Leu Ile Met Arg Gly Thr Glu Met Cys Pro Lys Ser Glu Asp
          20                      25                      30

Val Trp Leu Glu Ala Ala Arg Leu Gln Pro Gly Asp Thr Ala Lys Ala
          35                      40                      45

Val Val Ala Gln Ala Val Arg His Leu Pro Gln Ser Val Arg Ile Tyr
          50                      55                      60

Ile Arg Ala Ala Glu Leu Glu Thr Asp Ile Arg Ala Lys Lys Arg Val
          65                      70                      75                      80

Leu Arg Lys Ala Leu Glu His Val Pro Asn Ser Val Arg Leu Trp Lys
          85                      90                      95

Ala Ala Val Glu Leu Glu Glu Pro Glu Asp Ala Arg Ile Met Leu Ser
          100                      105                      110

Arg Ala Val Glu Cys Cys Pro Thr Ser Val Glu Leu Trp Leu Ala Leu
          115                      120                      125

Ala Arg Leu Glu Thr Tyr Glu Asn Ala Arg Lys Val Leu Asn Lys Ala
          130                      135                      140

Arg Glu Asn Ile Pro Thr Asp Arg His Ile Trp Ile Thr Ala Ala Lys
          145                      150                      155                      160

Leu Glu Glu Ala Asn Gly Asn Thr Gln Met Val Glu Lys Ile Ile Asp
          165                      170                      175

Arg Ala Ile Thr Ser Leu Arg Ala Asn Gly Val Glu Ile Asn Arg Glu
          180                      185                      190

Gln Trp Ile Gln Asp Ala Glu Glu Cys Asp Arg Ala Gly Ser Val Ala
          195                      200                      205

Thr Cys Gln Ala Val Met Arg Ala Val Ile Gly Ile Gly Ile Glu Glu
          210                      215                      220

Glu Asp Arg Lys His Thr Trp Met Glu Asp Ala Asp Ser Cys Val Ala
          225                      230                      235                      240

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His Asn Ala Leu Glu Cys Ala Arg Ala Ile Tyr Ala Tyr Ala Leu Gln  
                                   245                                  250                                  255  
 Val Phe Pro Ser Lys Lys Ser Val Trp Leu Arg Ala Ala Tyr Phe Glu  
                                   260                                  265                                  270  
 Lys Asn His Gly Thr Arg Glu Ser Leu Glu Ala Leu Leu Gln Arg Ala  
                                   275                                  280                                  285  
 Val Ala His Cys Pro Lys Ala Glu Val Leu Trp Leu Met Gly Ala Lys  
                                   290                                  295                                  300  
 Ser Lys Trp Leu Ala Gly Asp Val Pro Ala Ala Arg Ser Ile Leu Ala  
 305                                  310                                  315                                  320  
 Leu Ala Phe Gln Ala Asn Pro Asn Ser Glu Glu Ile Trp Leu Ala Ala  
                                   325                                  330                                  335  
 Val Lys Leu Glu Ser Glu Asn Asp Glu Tyr Glu Arg Ala Arg Arg Leu  
                                   340                                  345                                  350  
 Leu Ala Lys Ala Arg Thr Val Pro Pro Pro Pro Gly Cys Ser  
                                   355                                  360                                  365

<210> 78  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

<400> 78  
 Met Arg Thr Ser Lys Phe Ile Leu Phe Ile Phe Ser Asp Val Gly Asn  
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 Gly Leu Gly Phe Lys Arg Glu Leu Glu Glu Gly Met Phe Asp Ser His  
                                   20                                  25                                  30  
 Arg Arg Phe Leu Gln Gln Met Pro Leu Leu Ala Ile Ser His Phe Phe  
                                   35                                  40                                  45  
 Pro Gln Ile Leu Pro Thr Glu Ala Gln Ala Phe Thr Val Ser  
                                   50                                  55                                  60

<210> 79  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 79  
 Arg Pro Arg Leu Tyr Lys Ala Lys Arg Lys Thr Thr Asn Gly Val Val  
   1                                  5                                  10                                  15  
 Leu Cys Cys Ile Ala Leu His Lys Ile Arg Asn Arg Cys Leu Thr Ile  
                                   20                                  25                                  30  
 Glu Phe Val Phe Cys Glu Phe

35

<210> 80  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 80  
 Lys Thr Pro Ser Leu Gln Ser Lys Thr Lys Asn Asn Lys Trp Ser Cys  
           1                  5                  10                  15

Ala Met Leu Tyr Cys Phe Ala Gln Asn  
                   20                  25

<210> 81  
 <211> 29  
 <212> PRT  
 <213> Homo sapiens

<400> 81  
 Asp Pro Val Ser Thr Lys Gln Asn Glu Lys Gln Gln Met Glu Leu Cys  
           1                  5                  10                  15

Tyr Val Val Leu Leu Cys Thr Lys Leu Gly Thr Gly Val  
                   20                  25

<210> 82  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 82  
 Pro Lys Arg Arg Val Ser Asp Thr Ser Ser Gly Pro Thr Pro Cys Met  
           1                  5                  10                  15

Glu Pro Ile Leu Gly Arg Thr His Tyr Ser Gln Leu Arg Lys Lys Ser  
                   20                  25                  30

<210> 83  
 <211> 54  
 <212> PRT  
 <213> Homo sapiens

<400> 83  
 Leu Gly Gln Asp Ser His Gln His Ile Thr His Val Leu Leu Gly Arg  
           1                  5                  10                  15

Glu Lys Gln Tyr Ile Pro Val Glu Arg Ser Gln Ser Ile Ser Gly Arg  
                   20                  25                  30

Asn Val Val Lys Gly Gly Arg Cys Tyr Ala Ala Ala Pro Ser Val Pro  
                   35                  40                  45

Glu Val Ala Val Ile Pro

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<210> 84  
 <211> 54  
 <212> PRT  
 <213> Homo sapiens

<400> 84  
 Gly Asp Gln Ala His Arg Glu Gln Gly Lys Glu Gln Ala Met Phe Asp  
           1                          5                          10                          15  
 Lys Lys Val Gln Leu Gln Arg Met Val Asp Gln Arg Ser Val Ile Ser  
                           20                          25                          30  
 Asp Glu Lys Lys Val Ala Leu Leu Tyr Leu Asp Asn Glu Glu Glu Glu  
           35                          40                          45  
 Asn Asp Gly His Trp Phe  
           50

<210> 85  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 85  
 Gly Thr Arg His Pro Leu Ser Leu Ser His Lys Pro Ala Lys Lys Ile  
           1                          5                          10                          15  
 Asp Val Ala Arg Val Thr Phe Asp Leu Tyr Lys Leu Asn Pro Gln Asp  
                           20                          25                          30  
 Phe Ile Gly Cys Leu Asn Val Lys Ala Thr Phe Tyr Asp Thr Tyr Ser  
           35                          40                          45  
 Leu Ser Tyr Asp Leu His Cys Cys Gly Ala Lys Arg Ile Met Lys Glu  
           50                          55                          60  
 Ala Phe Arg Trp Ala Leu Phe Ser Met Gln Ala Thr Gly His Val Leu  
           65                          70                          75                          80  
 Leu Gly Thr Ser Cys Tyr Leu Gln Gln Leu Leu Asp Ala Thr Glu Glu  
                           85                          90                          95  
 Gly Gln Pro Pro Lys Gly Lys Ala Ser Ser Leu Ile Pro Thr Cys Leu  
                           100                          105                          110  
 Lys Ile Leu Gln  
           115

<210> 86

<400> 86  
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<210> 87  
 <211> 71  
 <212> PRT  
 <213> Homo sapiens

<400> 87  
 Asn Arg Gly Gly Val Gly Phe Gly Val Gly Trp Ser Leu Pro Phe Glu  
           1                          5                          10                          15  
 Leu Leu Ile Phe Met Ser Arg Leu Gln Asn Ser Arg Val Gly Leu Thr  
                           20                          25                          30  
 Met Trp Gly Gly Gly Gly Ser Ser Leu Phe Phe Tyr Phe Gln Val His  
                           35                          40                          45  
 Ser Trp Gly Trp Trp Gly Gly Arg Arg Ile Pro Leu Pro Lys Pro Leu  
           50                          55                          60  
 Val Cys Ala Glu Leu Ala Leu  
           65                          70

<210> 88  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 88  
 Tyr Arg His Glu Pro Leu Tyr Pro Ala Phe Pro Tyr Lys Ile Gln Arg  
           1                          5                          10                          15  
 Glu Asn Phe Tyr Thr Phe Ile Pro Gln Ile Lys Gln Val Leu Ser Ser  
                           20                          25                          30  
 Tyr Arg Ala Leu Ala Arg Ser Ile Cys Lys Arg Asn Leu Lys Phe Ser  
           35                          40                          45  
 Cys Arg Ile Lys Leu Asp Lys  
           50                          55

<210> 89  
 <211> 411  
 <212> PRT  
 <213> Homo sapiens

<400> 89  
 Leu Ala Thr His Ser Pro Gln Lys Ser His Gln Cys Ala His Cys Glu  
           1                          5                          10                          15  
 Lys Thr Phe Asn Arg Lys Asp His Leu Lys Asn His Leu Gln Thr His  
                           20                          25                          30  
 Asp Pro Asn Lys Met Ala Phe Gly Cys Glu Glu Cys Gly Lys Lys Tyr  
           35                          40                          45  
 Asn Thr Met Leu Gly Tyr Lys Arg His Leu Ala Leu His Ala Ala Ser

50					55					60					
Ser	Gly	Asp	Leu	Thr	Cys	Gly	Val	Cys	Ala	Leu	Glu	Leu	Gly	Ser	Thr
65					70					75					80
Glu	Val	Leu	Leu	Asp	His	Leu	Lys	Ala	His	Ala	Glu	Glu	Lys	Pro	Pro
				85					90					95	
Ser	Gly	Thr	Lys	Glu	Lys	Lys	His	Gln	Cys	Asp	His	Cys	Glu	Arg	Cys
			100					105					110		
Phe	Tyr	Thr	Arg	Lys	Asp	Val	Arg	Arg	His	Leu	Val	Val	His	Thr	Gly
		115					120					125			
Cys	Lys	Asp	Phe	Leu	Cys	Gln	Phe	Cys	Ala	Gln	Arg	Phe	Gly	Arg	Lys
	130					135					140				
Asp	His	Leu	Thr	Arg	His	Thr	Lys	Lys	Thr	His	Ser	Gln	Glu	Leu	Met
145						150					155				160
Lys	Glu	Ser	Leu	Gln	Thr	Gly	Asp	Leu	Leu	Ser	Thr	Phe	His	Thr	Ile
			165						170					175	
Ser	Pro	Ser	Phe	Gln	Leu	Lys	Ala	Ala	Ala	Leu	Pro	Pro	Phe	Pro	Leu
			180					185					190		
Gly	Ala	Ser	Ala	Gln	Asn	Gly	Leu	Ala	Ser	Ser	Leu	Pro	Ala	Glu	Val
		195					200					205			
His	Ser	Leu	Thr	Leu	Ser	Pro	Pro	Glu	Gln	Ala	Ala	Gln	Pro	Met	Gln
	210					215					220				
Pro	Leu	Pro	Glu	Ser	Leu	Ala	Ser	Leu	His	Pro	Ser	Val	Ser	Pro	Gly
225						230					235				240
Ser	Pro	Pro	Pro	Pro	Leu	Pro	Asn	His	Lys	Tyr	Asn	Thr	Thr	Ser	Thr
				245					250					255	
Ser	Tyr	Ser	Pro	Leu	Ala	Ser	Leu	Pro	Leu	Lys	Ala	Asp	Thr	Lys	Gly
			260					265					270		
Phe	Cys	Asn	Ile	Ser	Leu	Phe	Glu	Asp	Leu	Pro	Leu	Gln	Glu	Pro	Gln
		275					280					285			
Ser	Pro	Gln	Lys	Leu	Asn	Pro	Gly	Phe	Asp	Leu	Ala	Lys	Gly	Asn	Ala
	290					295					300				
Gly	Lys	Val	Asn	Leu	Pro	Lys	Glu	Leu	Pro	Ala	Asp	Ala	Val	Asn	Leu
305						310					315				320
Thr	Ile	Pro	Ala	Ser	Leu	Asp	Leu	Ser	Pro	Leu	Leu	Gly	Phe	Trp	Gln
			325						330					335	
Leu	Pro	Pro	Pro	Ala	Thr	Gln	Asn	Thr	Phe	Gly	Asn	Ser	Thr	Leu	Ala
			340					345					350		
Leu	Gly	Pro	Gly	Glu	Ser	Leu	Pro	His	Arg	Leu	Ser	Cys	Leu	Gly	Gln
		355					360					365			

Gln Gln Gln Glu Pro Pro Leu Ala Met Gly Thr Val Ser Leu Gly Gln  
 370 375 380

Leu Pro Leu Pro Pro Ile Pro His Val Phe Ser Ala Gly Thr Gly Ser  
 385 390 395 400

Ala Ile Leu Pro His Phe His His Ala Phe Arg  
 405 410

<210> 90

<211> 314

<212> PRT

<213> Homo sapiens

<400> 90

Lys Arg Cys Gln Arg Lys Gln Pro Leu Arg Gly Ile Gly Ile Leu Lys  
 1 5 10 15

Gln Ala Ile Asp Lys Met Gln Met Asn Thr Asn Gln Leu Thr Ser Ile  
 20 25 30

His Ala Asp Leu Cys Gln Leu Cys Leu Leu Ala Lys Cys Phe Lys Pro  
 35 40 45

Ala Leu Pro Tyr Leu Asp Val Asp Met Met Asp Ile Cys Lys Glu Asn  
 50 55 60

Gly Ala Tyr Asp Ala Lys His Phe Leu Cys Tyr Tyr Tyr Tyr Gly Gly  
 65 70 75 80

Met Ile Tyr Thr Gly Leu Lys Asn Phe Glu Arg Ala Leu Tyr Phe Tyr  
 85 90 95

Glu Gln Ala Ile Thr Thr Pro Ala Met Ala Val Ser His Ile Met Leu  
 100 105 110

Glu Ser Tyr Lys Lys Tyr Ile Leu Val Ser Leu Ile Leu Leu Gly Lys  
 115 120 125

Val Gln Gln Leu Pro Lys Tyr Thr Ser Gln Ile Val Gly Arg Phe Ile  
 130 135 140

Lys Pro Leu Ser Asn Ala Tyr His Glu Leu Ala Gln Val Tyr Ser Thr  
 145 150 155 160

Asn Asn Pro Ser Glu Leu Arg Asn Leu Val Asn Lys His Ser Glu Thr  
 165 170 175

Phe Thr Arg Asp Asn Asn Met Gly Leu Val Lys Gln Cys Leu Ser Ser  
 180 185 190

Leu Tyr Lys Lys Asn Ile Gln Arg Leu Thr Lys Thr Phe Leu Thr Leu  
 195 200 205

Ser Leu Gln Asp Met Ala Ser Arg Val Gln Leu Ser Gly Pro Gln Glu  
 210 215 220

Ala Glu Lys Tyr Val Leu His Met Ile Glu Asp Gly Glu Ile Phe Ala  
 225 230 235 240

Ser Ile Asn Gln Lys Asp Gly Met Val Ser Phe His Asp Asn Pro Glu  
 245 250 255

Lys Tyr Asn Asn Pro Ala Met Leu His Asn Ile Asp Gln Glu Met Leu  
 260 265 270

Lys Cys Ile Glu Leu Asp Glu Arg Leu Lys Ala Met Asp Gln Glu Ile  
 275 280 285

Thr Val Asn Pro Gln Phe Val Gln Lys Ser Met Gly Ser Gln Glu Asp  
 290 295 300

Asp Ser Gly Asn Lys Pro Ser Ser Tyr Ser  
 305 310

<210> 91  
 <211> 58  
 <212> PRT  
 <213> Homo sapiens

<400> 91  
 Val Leu Gln Glu Lys Ile Lys Ile Lys Lys Glu Lys Lys Glu Lys Ile  
 1 5 10 15

Lys Phe Lys Asn Cys Phe Glu Asn Val Gln Ile Lys Ser Asn Ile Leu  
 20 25 30

Ile Ile His Leu His Val Leu Leu Asn Ile Leu Ile Met Trp Met Phe  
 35 40 45

Thr Leu Cys Met Ile Leu Ala Glu Tyr His  
 50 55

<210> 92  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<400> 92  
 Met Asp Leu Ser Leu Leu Trp Val Leu Leu Pro Leu Val Thr Met Ala  
 1 5 10 15

Trp Gly Gln Tyr Gly Asp Tyr Gly Tyr Pro Tyr Gln Gln Tyr His Asp  
 20 25 30

Tyr Ser Asp Asp Gly Trp Val Asn Leu Asn Arg Gln Gly Phe Ser Tyr  
 35 40 45

Gln Cys Pro Gln Gly Gln Val Ile Val Ala Val Arg Ser Ile Phe Ser  
 50 55 60

Lys Lys Glu Gly Ser Asp Arg Gln Trp Asn Tyr Ala Cys Met Pro Thr

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<210> 93
<211> 247
<212> PRT
<213> Homo sapiens
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<400> 93
Met Gly Asn Gly Leu Ser Glu Glu Arg Gly Asn Asn Phe Asn His Ile
  1           5           10           15

Ser Pro Ile Pro Pro Val Pro His Pro Arg Ser Val Ile Gln Gln Ala
      20           25           30

Glu Glu Lys Leu His Thr Pro Gln Lys Arg Leu Met Thr Pro Trp Glu
      35           40           45

Glu Ser Asn Val Met Gln Asp Lys Asp Ala Pro Ser Pro Lys Pro Arg
      50           55           60

Leu Ser Pro Arg Glu Thr Ile Phe Gly Lys Ser Glu His Gln Asn Ser
  65           70           75           80

Ser Pro Thr Cys Gln Glu Asp Glu Glu Asp Val Arg Tyr Asn Ile Val
      85           90           95

His Ser Leu Pro Pro Asp Ile Asn Asp Thr Glu Pro Val Thr Met Ile
      100          105          110

Phe Met Gly Tyr Gln Gln Ala Glu Asp Ser Glu Glu Asp Lys Lys Phe
      115          120          125

Leu Thr Gly Tyr Asp Gly Ile Ile His Ala Glu Leu Val Val Ile Asp

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130		135		140
Asp Glu Glu Glu Glu Asp Glu Gly Glu Ala Glu Lys Pro Ser Tyr His				
145		150		155
Pro Ile Ala Pro His Ser Gln Val Tyr Gln Pro Ala Lys Pro Thr Pro				
	165		170	175
Leu Pro Arg Lys Arg Ser Glu Ala Ser Pro His Glu Asn Thr Asn His				
	180		185	190
Lys Ser Pro His Lys Asn Ser Ile Ser Leu Lys Glu Gln Glu Glu Ser				
	195		200	205
Leu Gly Ser Pro Val His His Ser Pro Phe Asp Ala Gln Thr Thr Gly				
	210		215	220
Asp Gly Thr Glu Asp Pro Ser Leu Thr Ala Leu Arg Met Arg Met Ala				
225		230		235
Lys Leu Gly Lys Lys Val Ile				
	245			

&lt;210&gt; 94

&lt;400&gt; 94

000

&lt;210&gt; 95

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 95

Met Pro Val Leu Arg Glu Tyr Leu Met Ser Gly Gly Ile Cys Pro Val				
1		5		10
Ser Arg Asp Thr Ile Asp Tyr Leu Leu Ser Lys Asn Gly Ser Gly Asn				
	20		25	30
Ala Ile Ile Ile Val Val Gly Gly Ala Ala Glu Ser Leu Ser Ser Met				
	35		40	45
Pro Gly Lys Asn Ala Val Thr Leu Arg Asn Arg Lys Gly Phe Val Lys				
	50		55	60
Leu Ala Leu Arg His Gly Ala Asp Leu Val Pro Ile Tyr Ser Phe Gly				
65		70		75
Glu Asn Glu Val Tyr Lys Gln Val Ile Phe Glu Glu Gly Ser Trp Gly				
	85		90	95
Arg Trp Val Gln Lys Lys Phe Gln Lys Tyr Ile Gly Phe Ala Pro Cys				
	100		105	110
Ile Phe His Gly Arg Gly Leu Phe Ser Ser Asp Thr Trp Gly Leu Val				

115	120	125
Pro Tyr Ser Lys Pro Ile Thr Thr Val Val Gly Glu Pro Ile Thr Ile		
130	135	140
Pro Lys Leu Glu His Pro Thr Gln Gln Asp Ile Asp Leu Tyr His Thr		
145	150	155
Met Tyr Met Glu Ala Leu Val Lys Leu Phe Asp Lys His Lys Thr Lys		
165	170	175
Phe Gly Leu Pro Glu Thr Glu Val Leu Glu Val Asn		
180	185	

&lt;210&gt; 96

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 96

Arg Gly Ala Gly Thr Gln Pro Gly Pro Leu Leu Lys Lys Pro Tyr Gln		
1	5	10
Pro Arg Ile Lys Ile Ser Lys Thr Ser Val Asp Gly Asp Pro His Phe		
20	25	30
Val Val Asp Phe Pro Leu Ser Arg Leu Thr Val Cys Phe Asn Ile Asp		
35	40	45
Gly Gln Pro Gly Asp Ile Leu Arg Leu Val Ser Asp His Arg Asp Ser		
50	55	60
Gly Val Thr Val Asn Gly Glu Leu Ile Gly Ala Pro Ala Pro Pro Asn		
65	70	75
Gly His Lys Lys Gln Arg Thr Tyr Leu Arg Thr Ile Thr Ile Leu Ile		
85	90	95
Asn Lys Pro Glu Arg Ser Tyr Leu Glu Ile Thr Pro Ser Arg Val Ile		
100	105	110
Leu Asp Gly Gly Asp Arg Leu Val Leu Pro Cys Asn Gln Ser Val Val		
115	120	125
Val Gly Ser Trp Gly Leu Glu Val Ser Val Ser Ala Asn Ala Asn Val		
130	135	140
Thr Val Thr Ile Gln Gly Ser Ile Ala Phe Val Ile Leu Ile His Leu		
145	150	155
Tyr Lys Lys Pro Ala Pro Phe Gln Arg His His Leu Gly Phe Tyr Ile		
165	170	175
Ala Asn Ser Glu Gly Leu Ser Ser Asn Cys His Gly Leu Leu Gly Gln		
180	185	190
Phe Leu Asn Gln Asp Ala Arg Leu Thr Glu Asp Pro Ala Gly Pro Ser		

195                                      200                                      205  
 Gln Asn Leu Thr His Pro Leu Leu Leu Gln Val Gly Glu Gly Pro Glu  
   210                                      215                                      220  
 Ala Val Leu Thr Val Lys Gly His Gln Val Pro Val Val Trp Lys Gln  
   225                                      230                                      235                                      240  
 Arg Lys Ile Tyr Asn Gly Glu Glu Gln Ile Asp Cys Trp Phe Ala Arg  
                                     245                                      250                                      255  
 Asn Asn Ala Ala Lys Leu Ile Asp Gly Glu Tyr Lys Asp Tyr Leu Ala  
                                     260                                      265                                      270  
 Ser His Pro Phe Asp Thr Gly Met Thr Leu Gly Gln Gly Met Ser Arg  
                                     275                                      280                                      285  
 Glu Leu  
   290

<210> 97  
 <211> 66  
 <212> PRT  
 <213> Homo sapiens

<400> 97  
 Asn Gln Phe Thr Ser Cys Ile Leu Phe Cys Asp Gly Gly His Trp Arg  
   1                                      5                                      10                                      15  
 Glu Leu Leu Phe Gln Ser Ile Met Ser Ser His Trp Thr Leu Lys Ile  
                                     20                                      25                                      30  
 Leu Leu Val Pro Leu Phe Tyr Leu Ser Leu Glu Phe Pro Ser Gly Phe  
                                     35                                      40                                      45  
 Val Leu Cys Leu Ala Asn Asp Leu Gly Tyr His Phe Ser Ser Arg Val  
   50                                      55                                      60  
 Arg Ser  
   65

<210> 98  
 <211> 54  
 <212> PRT  
 <213> Homo sapiens

<400> 98  
 Val Pro Gly Ala Leu Pro Leu Ala Val Gly Pro Pro Pro Pro Pro Ser  
   1                                      5                                      10                                      15  
 Gly Phe Pro Arg Asn Val Gln Pro Arg Arg Pro Ser Gln Ser Leu Gly  
                                     20                                      25                                      30  
 Arg Val Met Ser Ala Gly Pro Asp Lys Arg Pro Leu Gly Thr Leu Cys  
                                     35                                      40                                      45

Cys Phe Val Ser Phe Leu  
50

<210> 99  
<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 99  
Phe Phe Leu Tyr Phe Asn Gln Val Phe Tyr Trp Ser Gly Asn Cys Lys  
1 5 10 15  
Ile Tyr Lys Phe Leu Lys Gly Ile Ser Cys Leu Lys Ala Ser Ile Ala  
20 25 30  
Leu Tyr Pro Arg Ser Leu Ile Gln Thr Asn Thr Gln Asn Thr Glu Lys  
35 40 45

Ser

<210> 100  
<211> 98  
<212> PRT  
<213> Homo sapiens

<400> 100  
Met Gly Asn Lys Glu Pro Gly Ser His Gly His Arg Ser Asp Ala Asp  
1 5 10 15  
Pro Ser Arg Phe Ser Pro Val Leu Pro Pro Ala Val Gln Leu Gly Val  
20 25 30  
Trp Arg Glu Glu Gly Arg Gly Gly Ser Cys Pro Phe Ser Trp Gly Arg  
35 40 45  
Gly Pro Val Ser Ser Thr Trp Leu Phe Pro Lys Gly Ser Lys Arg Glu  
50 55 60  
Gly Leu Gly Glu Lys Thr Met Glu Arg Gly Pro Ala Lys Glu Asn Arg  
65 70 75 80  
Glu Glu Val Ser Gly Leu Ile Ser Leu Leu Ser Arg Cys Ser Gly Ser  
85 90 95  
Leu Ile

<210> 101  
<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 101  
Met Gly Lys Gly Leu Gly Glu Asp Gly Gln Gln Arg Ala Arg Glu Ser

1	5	10	15
Trp Thr Ser	Gln Arg Arg Arg Pro	Gln Gln Val Gln Ser Arg	Ala Ala
	20	25	30
Thr Ser Cys	Pro Ala Gly Cys Leu	Glu Gly Arg Gly Gln Arg Arg	Val
	35	40	45
Met Ser Leu	Gln Leu Gly Glu Gly Pro Ser	Glu Leu His Val Ala Phe	
	50	55	60
Ser Gln Arg	Glu Gln Glu Gly Arg Ile Gly	Arg Glu Asn Asn Gly Glu	
	65	70	75
Gly Thr Cys	Glu Gly Lys Gln Gly Gly Ser	Glu Arg Phe Asp Gln Pro	
	85	90	95
Ala Ile Thr	Val Phe Trp Leu Ser Tyr Leu	Ala Arg Arg Leu Arg Asp	
	100	105	110
Arg Tyr Ile	Thr Ser		
	115		

&lt;210&gt; 102

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 102

Met Asn Arg	Gly Pro Pro Thr Phe Trp Thr	Phe Glu Asp Arg Gly Ala
1	5	10
Lys Arg Asp	Arg Ser Ala Arg Gly Pro His	Pro Ala Pro Leu Gly Glu
	20	25
Pro Leu Leu	Thr Trp Val Ser Leu Arg Leu	His Gln Leu Val Gly Leu
	35	40
Gln Ala Ser	Pro Pro Asp Ser Pro His Cys Trp	Ala Thr Leu Asn Leu
	50	55
Lys Phe His	Cys Pro Ala Pro Pro Thr Pro Thr	Pro Lys Phe Pro Lys
	65	70
Glu Met Ser	Lys Thr His Ala His Thr Tyr Ile	His Thr Cys Thr Cys
	85	90
Ala His Thr	Ser Cys Val Thr Thr Gly Gln Gly	Asn Ala Ser Leu Arg
	100	105
Ile Pro Gly	Pro Gly Pro Gly Val Lys Gly Cys	Ser Gly Thr Leu Pro
	115	120
Pro Asn Leu	Leu Glu Asp Pro Glu Cys Gly Gly	Arg Ile Gly Cys Leu
	130	135
		140

Pro

145

<210> 103  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 103

Met Arg Thr His Val Leu Cys Tyr His Trp Pro Arg Lys Arg Glu Ser  
 1 5 10 15

Gln Asp Ser Arg Ala Trp Thr Trp Gly Lys Gly Leu Leu Trp Asp Ser  
 20 25 30

Ala Pro Gln Pro Leu Gly Gly Pro Arg Val Trp Gly Gln Asp Trp Val  
 35 40 45

Ser Ala Leu Thr His Arg Ile Ser Pro Gly Pro Lys Ala Glu Lys Lys  
 50 55 60

Ser Gly Arg Arg Ser Arg Arg Gln Gly Trp Trp Thr Lys Val Gly Val  
 65 70 75 80

Arg Leu Lys Ser Gly Ser Glu Thr Arg Phe Asp His Thr His His Pro  
 85 90 95

Ser Val Pro Pro Gly Gln His Ala Pro Leu Glu Pro Leu His Arg Leu  
 100 105 110

Ile Arg Thr Arg Gln Asn Leu Leu Leu Thr Asn Leu Leu Arg Ala Val  
 115 120 125

Tyr Arg Gly Ile Thr Leu Val Gln Glu Gly Cys Pro Ser Cys Phe His  
 130 135 140

Thr Thr Thr Gly Pro Thr Ile Pro Leu Leu Ala Ser Leu Arg Arg Pro  
 145 150 155 160

Arg Asp Pro Gln Lys Pro Gly Glu Lys Glu Ser Trp Pro Leu Val Ser  
 165 170 175

Thr Ala Phe Arg Ala Thr Gly Gly Asp Ala Gln Met Thr Trp Val Lys  
 180 185 190

Gly Leu Ser Gln Thr  
 195

<210> 104  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 104

Ser Glu Ala Arg Asn Ala Pro Ser Gly Thr Ala Gln Thr Phe Ala Met  
 1 5 10 15

Gly Phe Met Thr Gly Thr Ile Ser Ser Met Tyr Gln Thr Lys Ala Val  
                   20                  25                  30  
 Ile Ile Ala Met Ile Ile Thr Ala Val Val Ser Ile Ser Val Thr Ile  
                   35                  40                  45  
 Phe Cys Phe Gln Thr Lys Val Asp Phe Thr Ser Cys Thr Gly Leu Phe  
           50                  55                  60  
 Cys Val Leu Gly Ile Val Leu Leu Val Thr Gly Ile Val Thr Ser Ile  
   65                  70                  75                  80  
 Val Leu Tyr Phe Gln Tyr Val Tyr Trp Leu His Met Leu Tyr Ala Ala  
                   85                  90                  95  
 Leu Gly Ala Ile Cys Phe Thr Leu Phe Leu Ala Tyr Asp Thr Gln Leu  
                  100                 105                 110  
 Val Leu Gly Asn Arg Lys His Thr Ile Ser Pro Glu Asp Tyr Ile Thr  
          115                 120                 125  
 Gly Ala Leu Gln Ile Tyr Thr Asp Ile Ile Tyr Ile Phe Thr Phe Val  
   130                 135                 140  
 Leu Gln Leu Met Gly Asp Arg Asn  
 145                 150

<210> 105  
 <211> 66  
 <212> PRT  
 <213> Homo sapiens

<400> 105  
 His Leu Leu Ser Pro Pro His Ile Leu Gly Thr Ala Phe Ser Ser Thr  
   1                  5                 10                 15  
 Gly Asn Gly Thr Asp Gly Gln Lys Thr Ser Ile Thr Phe Met Lys Gly  
          20                 25                 30  
 Leu Leu Glu Leu Pro Gly Lys Lys Ala Cys Leu Gly Glu Leu Gly Arg  
   35                 40                 45  
 Cys Arg Gln Cys Gly Trp Ala Gly Gly Gln Pro Val Val Leu Leu Pro  
   50                 55                 60  
 Ala Gln  
   65

<210> 106  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 106  
 Pro Thr Ser Leu Ile Trp Pro Thr Thr Met Phe Cys Ser Val His Val  
   1                  5                 10                 15

Leu Phe Lys Ser Ile Leu Asn Trp Leu Pro Ser Phe Lys Leu Asn Gln  
                   20                  25                  30  
 Thr Leu Lys Ala Trp Ser Ser His Thr Gly Pro Thr Phe Pro His Gly  
                   35                  40                  45  
 Asn Tyr Glu Arg Ala Pro Ala Gln Gln Gly Leu Ser Arg Ser Leu Pro  
                   50                  55                  60  
 Pro Pro Leu Pro Val Pro Gln Ile Trp Pro Leu Leu Arg Lys Ile Arg  
                   65                  70                  75                  80  
 Thr Ala Thr Gly Pro Ser Glu Pro Lys Pro Thr  
                   85                  90

<210> 107  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 107  
 Leu Leu Pro Ser Phe Phe Leu His Phe Ser Leu Ser Ile Tyr Phe Pro  
   1                  5                  10                  15  
 His Pro Thr Phe Leu Glu Gln Pro Leu Val Leu Gln Glu Met Ala Leu  
                   20                  25                  30  
 Met Asp Arg Arg Leu Ala Leu Pro Ser  
                   35                  40

<210> 108  
 <211> 471  
 <212> PRT  
 <213> Homo sapiens

<400> 108  
 Asn Glu Leu Lys Ala Ser Gly Gly Glu Ile Lys Ile His Lys Met Glu  
   1                  5                  10                  15  
 Gln Lys Glu Asn Val Pro Pro Gly Pro Glu Val Cys Ile Thr His Gln  
                   20                  25                  30  
 Glu Gly Glu Lys Ile Ser Ala Asn Glu Asn Ser Leu Ala Val Arg Ser  
                   35                  40                  45  
 Thr Pro Ala Glu Asp Asp Ser Arg Asp Ser Gln Val Lys Ser Glu Val  
                   50                  55                  60  
 Gln Gln Pro Val His Pro Lys Pro Leu Ser Pro Asp Ser Arg Ala Ser  
                   65                  70                  75                  80  
 Ser Leu Ser Glu Ser Ser Pro Pro Lys Ala Met Lys Lys Phe Gln Ala  
                   85                  90                  95  
 Pro Ala Arg Glu Thr Cys Val Glu Cys Gln Lys Thr Val Tyr Pro Met



100					105					110					
Glu	Arg	Leu	Leu	Ala	Asn	Gln	Gln	Val	Phe	His	Ile	Ser	Cys	Phe	Arg
		115					120					125			
Cys	Ser	Tyr	Cys	Asn	Asn	Lys	Leu	Ser	Leu	Gly	Thr	Tyr	Ala	Ser	Leu
	130					135					140				
His	Gly	Arg	Ile	Tyr	Cys	Lys	Pro	His	Phe	Asn	Gln	Leu	Phe	Lys	Ser
145					150					155					160
Lys	Gly	Asn	Tyr	Asp	Glu	Gly	Phe	Gly	His	Arg	Pro	His	Lys	Asp	Leu
				165					170					175	
Trp	Ala	Ser	Lys	Asn	Glu	Asn	Glu	Glu	Ile	Leu	Glu	Arg	Pro	Ala	Gln
			180					185					190		
Leu	Ala	Asn	Ala	Arg	Glu	Thr	Pro	His	Ser	Pro	Gly	Val	Glu	Asp	Ala
		195					200					205			
Pro	Ile	Ala	Lys	Gly	Gly	Val	Leu	Ala	Ala	Ser	Met	Glu	Ala	Lys	Ala
	210					215					220				
Ser	Ser	Gln	Gln	Glu	Lys	Glu	Asp	Lys	Pro	Ala	Glu	Thr	Lys	Lys	Leu
225					230					235					240
Arg	Ile	Ala	Trp	Pro	Pro	Pro	Thr	Glu	Leu	Gly	Ser	Ser	Gly	Ser	Ala
				245					250					255	
Leu	Glu	Glu	Gly	Ile	Lys	Met	Ser	Lys	Pro	Lys	Trp	Pro	Pro	Glu	Asp
			260					265					270		
Glu	Ile	Ser	Lys	Pro	Glu	Val	Pro	Glu	Asp	Val	Asp	Leu	Asp	Leu	Lys
		275					280					285			
Lys	Leu	Arg	Arg	Ser	Ser	Ser	Leu	Lys	Glu	Arg	Ser	Arg	Pro	Phe	Thr
	290					295					300				
Val	Ala	Ala	Ser	Phe	Gln	Ser	Thr	Ser	Val	Lys	Ser	Pro	Lys	Thr	Val
305					310					315					320
Ser	Pro	Pro	Ile	Arg	Lys	Gly	Trp	Ser	Met	Ser	Glu	Gln	Ser	Glu	Glu
				325					330					335	
Ser	Val	Gly	Gly	Arg	Val	Ala	Glu	Arg	Lys	Gln	Val	Glu	Asn	Ala	Lys
			340					345					350		
Ala	Ser	Lys	Lys	Asn	Gly	Asn	Val	Gly	Lys	Thr	Thr	Trp	Gln	Asn	Lys
		355					360					365			
Glu	Ser	Lys	Gly	Glu	Thr	Gly	Lys	Arg	Ser	Lys	Glu	Gly	His	Ser	Leu
	370					375					380				
Glu	Met	Glu	Asn	Glu	Asn	Leu	Val	Glu	Asn	Gly	Ala	Asp	Ser	Asp	Glu
385					390					395					400
Asp	Asp	Asn	Ser	Phe	Leu	Lys	Gln	Gln	Ser	Pro	Gln	Glu	Pro	Lys	Ser
				405					410					415	

Leu Asn Trp Ser Ser Phe Val Asp Asn Thr Phe Ala Glu Glu Phe Thr  
                   420                  425                  430  
 Thr Gln Asn Gln Lys Ser Gln Asp Val Glu Leu Trp Glu Gly Glu Val  
                   435                  440                  445  
 Val Lys Glu Leu Ser Val Glu Glu Gln Ile Lys Arg Asn Arg Tyr Tyr  
                   450                  455                  460  
 Asp Glu Asp Glu Asp Glu Glu  
 465                  470

<210> 109

<400> 109  
 000

<210> 110

<400> 110  
 000

<210> 111

<400> 111  
 000

<210> 112

<211> 94

<212> PRT

<213> Homo sapiens

<400> 112

Arg Lys Met Leu Arg Ala Ala Leu Pro Ala Leu Pro Ile Pro Arg Cys  
   1                  5                  10                  15  
 Lys Tyr Thr Leu Phe Leu Ile Ala His Met Gly Pro Pro Tyr Leu Leu  
                   20                  25                  30  
 Ala Leu Val Leu Met Leu Lys Ser Trp Pro Trp Glu Arg Cys Leu Pro  
                   35                  40                  45  
 Gly Arg His Ser Cys Leu Val Gln Ala Lys Pro Leu Cys Asn Ala Ser  
   50                  55                  60  
 Pro Phe Trp Cys Tyr Glu Val Pro Leu Cys Arg Arg Phe His Gln Gln  
   65                  70                  75                  80  
 Leu Val Thr Val Pro Ser Thr Arg Thr Cys Phe Glu Ile Ser  
                   85                  90

<210> 113

&lt;211&gt; 324

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 113

Gly	Leu	Ser	Thr	Phe	Gln	Asn	Trp	Leu	Pro	Ser	Thr	Pro	Ala	Thr	Ser
1				5					10					15	
Trp	Gly	Gly	Leu	Thr	Ser	Ser	Arg	Thr	Thr	Asp	Asn	Gly	Gly	Glu	Gln
			20					25					30		
Thr	Ala	Leu	Ser	Pro	Gln	Glu	Ala	Pro	Phe	Ser	Gly	Ile	Ser	Thr	Pro
		35					40					45			
Pro	Asp	Val	Leu	Ser	Val	Gly	Pro	Glu	Pro	Ala	Trp	Glu	Ala	Ala	Ala
	50					55					60				
Thr	Thr	Lys	Gly	Leu	Ala	Thr	Asp	Val	Ala	Thr	Phe	Thr	Gln	Gly	Ala
65					70					75					80
Ala	Pro	Gly	Arg	Glu	Asp	Thr	Gly	Leu	Leu	Thr	Thr	Thr	His	Gly	Pro
				85					90					95	
Glu	Glu	Ala	Pro	Arg	Leu	Ala	Met	Leu	Gln	Asn	Glu	Leu	Glu	Gly	Leu
			100					105					110		
Gly	Asp	Ile	Phe	His	Pro	Met	Asn	Ala	Glu	Glu	Gln	Ala	Gln	Leu	Ala
	115						120					125			
Ala	Ser	Gln	Pro	Gly	Pro	Lys	Val	Leu	Ser	Ala	Glu	Gln	Gly	Ser	Tyr
	130					135					140				
Phe	Val	Arg	Leu	Gly	Asp	Leu	Gly	Pro	Ser	Phe	Arg	Gln	Arg	Ala	Phe
145					150					155					160
Glu	His	Ala	Val	Ser	His	Leu	Gln	His	Gly	Gln	Phe	Gln	Ala	Arg	Asp
				165					170					175	
Thr	Leu	Ala	Gln	Leu	Gln	Asp	Cys	Phe	Arg	Leu	Ile	Glu	Lys	Ala	Gln
			180					185					190		
Gln	Ala	Pro	Glu	Gly	Gln	Pro	Arg	Leu	Asp	Gln	Gly	Ser	Gly	Ala	Ser
		195					200					205			
Ala	Glu	Asp	Ala	Ala	Val	Gln	Glu	Glu	Arg	Asp	Ala	Gly	Val	Leu	Ser
	210					215					220				
Arg	Val	Cys	Gly	Leu	Leu	Arg	Gln	Leu	His	Thr	Ala	Tyr	Ser	Gly	Leu
225					230					235					240
Val	Ser	Ser	Leu	Gln	Gly	Leu	Pro	Ala	Glu	Leu	Gln	Gln	Pro	Val	Gly
			245						250					255	
Arg	Ala	Arg	His	Ser	Leu	Cys	Glu	Leu	Tyr	Gly	Ile	Val	Ala	Ser	Ala
			260					265					270		
Gly	Ser	Val	Glu	Glu	Leu	Pro	Ala	Glu	Arg	Leu	Val	Gln	Ser	Arg	Glu
		275					280					285			

Gly Val His Gln Ala Trp Gln Gly Leu Glu Gln Leu Leu Glu Gly Leu  
 290 295 300

Gln His Asn Pro Pro Leu Ser Trp Leu Val Gly Pro Phe Ala Leu Pro  
 305 310 315 320

Ala Gly Gly Gln

<210> 114

<211> 148

<212> PRT

<213> Homo sapiens

<400> 114

Ile Ala Met Thr Pro Pro Asn Ala Thr Glu Ala Ser Lys Pro Gln Gly  
 1 5 10 15

Thr Thr Val Cys Pro Pro Cys Asp Asn Glu Leu Lys Ser Glu Ala Ile  
 20 25 30

Ile Glu His Leu Cys Ala Ser Glu Phe Ala Leu Arg Met Lys Ile Lys  
 35 40 45

Glu Val Lys Lys Glu Asn Gly Asp Lys Lys Ile Val Pro Lys Lys Lys  
 50 55 60

Lys Pro Leu Lys Leu Gly Pro Ile Lys Lys Lys Asp Leu Lys Lys Leu  
 65 70 75 80

Val Leu Tyr Leu Lys Asn Gly Ala Asp Cys Pro Cys His Gln Leu Asp  
 85 90 95

Asn Leu Ser His His Phe Leu Ile Met Gly Arg Lys Val Lys Ser Gln  
 100 105 110

Tyr Leu Leu Thr Ala Ile His Lys Trp Asp Lys Lys Asn Lys Glu Phe  
 115 120 125

Lys Asn Phe Met Lys Lys Met Lys Asn His Glu Cys Pro Thr Phe Gln  
 130 135 140

Ser Val Phe Lys  
 145

<210> 115

<211> 45

<212> PRT

<213> Homo sapiens

<400> 115

Pro Val Ile Tyr Ser Val Leu Ile Arg Ser Glu Ile Arg Tyr Lys Ile  
 1 5 10 15

Ser Arg Pro Val Thr Thr Asp Phe Ile Lys Ser Glu Ser Leu Ile Leu

20 25 30  
 Ala Cys Leu Tyr Leu Ile Ser Glu Arg Met Ser Thr Leu  
           35                   40                   45

<210> 116  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 116  
 Pro Asp Cys Glu Ser Phe Met Tyr Phe Asn Leu Asp Ser Val Phe Leu  
       1                   5                   10                   15  
 Arg Val Leu Ser Met Lys Leu Ala Asp Ser Arg Gln Asp Ser Phe Phe  
                   20                   25                   30

His His Gly Trp Leu Ile Ser Pro  
           35                   40

<210> 117  
 <211> 27  
 <212> PRT  
 <213> Homo sapiens

<400> 117  
 Thr Asn Glu His Thr Leu Thr Ser Tyr Leu Gln Leu Pro Phe Ser Phe  
       1                   5                   10                   15  
 Asn Arg Ile Val Lys Ala Ser Cys Ile Leu Ile  
                   20                   25

<210> 118

<400> 118  
 000

<210> 119  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 119  
 Arg Ser Asn Ala Val Gln Leu Thr Arg Met Glu Tyr Ala Met Lys Ser  
       1                   5                   10                   15  
 Leu Ser Leu Leu Tyr Pro Lys Ser Leu Ser Arg His Val Ser Val Arg  
                   20                   25                   30  
 Thr Ser Val Val Thr Gln Gln Leu Leu Ser Glu Pro Ser Pro Lys Ala  
                   35                   40                   45  
 Pro Arg Ala Arg Pro Cys Arg Val Ser Thr Ala Asp Arg Ser Val Arg  
       50                   55                   60

Lys Gly Ile Met Ala Tyr Ser Leu Glu Asp Leu Leu Leu Lys Val Arg  
 65 70 75 80

Asp Thr Leu Met Leu Ala Asp Lys Pro Phe Phe Leu Val Leu Glu Glu  
 85 90 95

Asp Gly Thr Thr Val Glu Thr Glu Glu Tyr Phe Gln Ala Leu Ala Gly  
 100 105 110

Asp Thr Val Phe Met Val Leu Gln Lys Gly Gln Lys Trp Gln Pro Pro  
 115 120 125

Ser Glu Gln Gly Thr Arg His  
 130 135

<210> 120

<400> 120  
 000

<210> 121

<400> 121  
 000

<210> 122

<211> 193

<212> PRT

<213> Homo sapiens

<400> 122

Glu Ala Cys Ala His Thr Leu Ser Cys Pro Ala Leu Ala Arg Leu Gly  
 1 5 10 15

Arg Ala Arg Arg Arg Pro Trp Met Ser His Arg Thr Ser Ser Thr Phe  
 20 25 30

Arg Ala Glu Arg Ser Phe His Ser Ser Ser Ser Ser Ser Ala Ala  
 35 40 45

Thr Ser Ser Ser Ala Ser Arg Ala Leu Pro Ala Gln Asp Pro Pro Met  
 50 55 60

Glu Lys Ala Leu Ser Met Phe Ser Asp Asp Phe Gly Ser Phe Met Arg  
 65 70 75 80

Pro His Ser Glu Pro Leu Ala Phe Pro Ala Arg Pro Gly Gly Ala Gly  
 85 90 95

Asn Ile Lys Thr Leu Gly Asp Ala Tyr Glu Phe Ala Val Asp Val Arg  
 100 105 110

Asp Phe Ser Pro Glu Asp Ile Ile Val Thr Thr Ser Asn Asn His Ile  
 115 120 125

Glu Val Arg Ala Glu Lys Leu Ala Ala Asp Gly Thr Val Met Asn Thr  
 130 135 140

Phe Ala His Lys Cys Gln Leu Pro Glu Asp Val Asp Pro Thr Ser Val  
 145 150 155 160

Thr Ser Ala Leu Arg Glu Asp Gly Ser Leu Thr Ile Arg Ala Arg Arg  
 165 170 175

His Pro His Thr Glu His Val Gln Gln Thr Phe Arg Thr Glu Ile Lys  
 180 185 190

Ile

<210> 123

<400> 123  
 000

<210> 124

<211> 38

<212> PRT

<213> Homo sapiens

<400> 124

Met Ala Thr Phe Tyr Pro Leu Phe Pro Asn Gly Gly Gly Thr Tyr Pro  
 1 5 10 15

Glu Val Val Asn Asp Phe Pro Leu Lys Leu Leu Tyr Phe Thr Asn Leu  
 20 25 30

Asn Tyr Phe Val Leu Met  
 35

<210> 125

<211> 65

<212> PRT

<213> Homo sapiens

<400> 125

Met Trp Leu Phe His Asp Ala Gly Ile Arg Ser Ala Gly Gly Leu Ser  
 1 5 10 15

Leu Leu Ser Cys Gly Ser Trp Pro Leu Pro Ser Gly Tyr His Arg Leu  
 20 25 30

Gln Asp Thr Asn Gly Gln Gln Lys Asn Val Thr Leu Leu Ile Leu Ser  
 35 40 45

Ser Ser Ser Ile Gly Thr Lys Leu Pro Ser Arg Pro Arg Glu Ile Leu  
 50 55 60

Cys

65

&lt;210&gt; 126

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 126

Glu	Thr	Arg	Val	Lys	Thr	Ser	Leu	Glu	Leu	Leu	Arg	Thr	Gln	Leu	Glu
1				5					10					15	
Pro	Thr	Gly	Thr	Val	Gly	Asn	Thr	Ile	Met	Thr	Ser	Gln	Pro	Val	Pro
			20					25					30		
Asn	Glu	Thr	Ile	Ile	Val	Leu	Pro	Ser	Asn	Val	Ile	Asn	Phe	Ser	Gln
		35					40					45			
Ala	Glu	Lys	Pro	Glu	Pro	Thr	Asn	Gln	Gly	Gln	Asp	Ser	Leu	Lys	Lys
	50					55					60				
His	Leu	His	Ala	Glu	Ile	Lys	Val	Ile	Gly	Thr	Ile	Gln	Ile	Leu	Cys
65					70					75					80
Gly	Met	Met	Val	Leu	Ser	Leu	Gly	Ile	Ile	Leu	Ala	Ser	Ala	Ser	Phe
				85					90					95	
Ser	Pro	Asn	Phe	Thr	Gln	Val	Thr	Ser	Thr	Leu	Leu	Asn	Ser	Ala	Tyr
			100					105					110		
Pro	Phe	Ile	Gly	Pro	Phe	Phe	Phe	Ile	Ile	Ser	Gly	Ser	Leu	Ser	Ile
		115					120					125			
Ala	Thr	Glu	Lys	Arg	Leu	Thr	Lys	Leu	Leu	Val	His	Ser	Ser	Leu	Val
	130					135					140				
Gly	Ser	Ile	Leu	Ser	Ala	Leu	Ser	Ala	Leu	Val	Gly	Phe	Ile	Ile	Leu
145					150					155					160
Ser	Val	Lys	Gln	Ala	Thr	Leu	Asn	Pro	Ala	Ser	Leu	Gln	Cys	Glu	Leu
			165						170					175	
Asp	Lys	Asn	Asn	Ile	Pro	Thr	Arg	Ser	Tyr	Val	Ser	Tyr	Phe	Tyr	His
		180						185					190		
Asp	Ser	Leu	Tyr	Thr	Thr	Asp	Cys	Tyr	Thr	Ala	Lys	Ala	Ser	Leu	Ala
		195					200					205			
Gly	Thr	Leu	Ser	Leu	Met	Leu	Ile	Cys	Thr	Leu	Leu	Glu	Phe	Cys	Leu
	210					215						220			
Ala	Val	Leu	Thr	Ala	Val	Leu	Arg	Trp	Lys	Gln	Ala	Tyr	Ser	Asp	Phe
225					230					235					240
Pro	Gly	Val	Ser	Val	Leu	Ala	Gly	Phe	Thr						
				245					250						



&lt;210&gt; 127

<400> 127  
000

&lt;210&gt; 128

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 128

Met	His	Thr	Cys	Gln	Ile	Tyr	Ile	Tyr	Ser	Thr	Asn	Val	Thr	Phe	Leu
1				5					10					15	
Phe	Phe	Val	Leu	Asp	Val	Arg	Ala	Cys	Ser	Tyr	Val	Arg	Tyr	Leu	His
			20					25					30		
Lys	Leu	Leu	His	Tyr	Phe	Phe	Leu	Cys	Asn	Thr	Phe	Leu	Phe	Val	Tyr
		35					40					45			
Val	Val	Gln	Ile	Tyr	Ser	Phe	Leu	Lys	Leu	Leu	Lys	Lys			
	50					55					60				

&lt;210&gt; 129

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 129

Pro	Ala	Ser	Asn	Arg	Pro	Lys	Ser	Gly	Arg	Ala	Pro	Glu	Pro	Arg	Glu
1				5					10					15	
Pro	Ala	Arg	Arg	Ser	Ala	Gly	Gly	Ser	Pro	Pro	Pro	Pro	Pro	Trp	Pro
			20					25						30	
Arg	Val	Pro	Ala	Ala	Ala	Ala	Gly	Thr	Glu	Gly	Ala	Ser	Pro	Asp	Leu
		35					40					45			
Ala	Pro	Leu	Arg	Pro	Ala	Ala	Pro	Gly	Gln	Thr	Pro	Leu	Arg	Lys	Glu
	50					55					60				
Val	Leu	Lys	Ser	Lys	Met	Gly	Lys	Ser	Glu	Lys	Ile	Ala	Leu	Pro	His
	65				70					75				80	
Gly	Gln	Leu	Val	His	Gly	Ile	His	Leu	Tyr	Glu	Gln	Pro	Lys	Ile	Asn
				85					90					95	
Arg	Gln	Lys	Ser	Lys	Tyr	Asn	Leu	Pro	Leu	Thr	Lys	Ile	Thr	Ser	Ala
			100					105					110		
Lys	Arg	Asn	Glu	Asn	Asn	Phe	Trp	Gln	Asp	Ser	Val	Ser	Ser	Asp	Arg
		115					120					125			
Ile	Gln	Lys	Gln	Glu	Lys	Lys	Pro	Phe	Lys	Asn	Thr	Glu	Asn	Ile	Lys
	130					135					140				

Asn Ser His Leu Lys Lys Ser Ala Phe Leu Thr Glu Val Ser Gln Lys  
 145 150 155 160

Glu Asn Tyr Ala Gly Ala Lys Phe Ser Asp Pro Pro Ser Pro Ser Val  
 165 170 175

Leu Pro Lys Pro Pro Ser His Trp Met Gly Ser Thr Val Glu Asn Ser  
 180 185 190

Asn Gln Asn Arg Glu Leu Met Ala Val His Leu Lys Thr Leu Leu Lys  
 195 200 205

Val Gln Thr  
 210

<210> 130

<400> 130  
 000

<210> 131

<211> 48

<212> PRT

<213> Homo sapiens

<400> 131

Met Ile Leu Thr Asn Pro Leu Lys Ser Lys Thr Asp Thr Phe Ile Asn  
 1 5 10 15

Arg Ser Ile Cys Lys Gln Ser Gln Tyr Ala Leu Gly Arg Leu Thr Ile  
 20 25 30

Phe Leu Thr Cys Gln Gly Val Leu Pro Ser Gln Gln Thr Pro Leu Ile  
 35 40 45

<210> 132

<211> 78

<212> PRT

<213> Homo sapiens

<400> 132

Leu Gly Ile Phe Leu His Gln Tyr Val Ile Phe Asn Gln Asn Val Lys  
 1 5 10 15

Phe Leu Leu Asn Ser Leu Pro Ala Ile Val Ile Val Pro Ser Trp Pro  
 20 25 30

Thr Trp Phe Pro Asp Val Val Asn Asn Ile Asn Ala Ser Ala Val Gly  
 35 40 45

Pro Leu Leu Arg Cys Leu Arg Arg Asn Phe Val Leu Ala Ile Ser Ile  
 50 55 60

Asn Phe Val Phe Tyr Leu Gln Phe Gly Arg Arg Lys Val Thr  
 65 70 75

<210> 133  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 133  
 Met Asp Met Ala Lys Thr Lys Phe Leu Arg Arg His Leu Ser Lys Gly  
           1                  5                  10                  15  
 Pro Thr Ala Asp Ala Leu Met Leu Phe Thr Thr Ser Gly Asn Gln Val  
                   20                  25                  30  
 Gly His Asp Gly Thr Ile Thr Met Ala Gly Asn Glu Phe Asn Lys Asn  
           35                  40                  45  
 Phe Thr Phe Trp Leu Lys Ile Thr Tyr Trp Cys Lys Lys Ile Pro Asn  
           50                  55                  60  
 Gln Ile Lys Ser Tyr Cys Phe Asp  
           65                  70

<210> 134

<400> 134  
 000

<210> 135  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 135  
 Leu Asn Val Phe Ser Ser Leu Gln Ile Ser Glu Leu Ile Phe Pro Pro  
           1                  5                  10                  15  
 Leu Pro Met Trp His Pro Leu Pro Arg Lys Lys Pro Gly Met Tyr Arg  
                   20                  25                  30  
 Gly Asn Gly His Gln Asn His Tyr Pro Pro Pro Val Pro Phe Gly Tyr  
           35                  40                  45  
 Pro Asn Gln Gly Arg Lys Asn Lys Pro Tyr Arg Pro Ile Pro Val Thr  
           50                  55                  60  
 Trp Val Pro Pro Pro Gly Met His Cys Asp Arg Asn His Trp Ile Asn  
           65                  70                  75                  80  
 Pro His Met Leu Ala Pro His  
                   85

<210> 136

<400> 136

000

<210> 137  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 137  
 Met Tyr Gly Asn Ile Leu Cys Pro Thr Leu His Thr Pro Cys Thr Gln  
   1                  5                  10                  15  
 Ile Leu Tyr Cys Met Asn Tyr Ala Leu Ser Arg Ile Gln Cys Gln Gly  
                   20                  25                  30  
 Glu Leu Gly Glu Ile Asn Tyr Phe Asn Phe Phe Phe Ile Leu Tyr Lys  
                   35                  40                  45  
 Ala Met Asp Phe Ile Trp Leu Met Cys Ala Leu Tyr Thr Ser His Phe  
                   50                  55                  60  
 Asn Arg Met Glu Leu Leu Ile Ile Phe Gln Arg Val Ile Asp Met Gln  
   65                  70                  75                  80  
 Lys Phe Gln

<210> 138  
 <211> 366  
 <212> PRT  
 <213> Homo sapiens

<400> 138  
 Arg Pro Lys Pro Gly His Pro Leu Tyr Ser Lys Tyr Met Arg Gly Asp  
   1                  5                  10                  15  
 Val Leu Val Met Leu Lys Gln Thr Glu Asn Asn Tyr Leu Glu Cys Gln  
                   20                  25                  30  
 Lys Gly Glu Asp Thr Gly Arg Val His Leu Ser Gln Met Lys Ile Ile  
                   35                  40                  45  
 Thr Pro Leu Asp Glu His Leu Arg Ser Arg Pro Asn Asp Pro Ser His  
                   50                  55                  60  
 Ala Gln Lys Pro Val Asp Ser Gly Ala Pro His Ala Val Val Leu His  
   65                  70                  75                  80  
 Asp Phe Pro Ala Glu Gln Val Asp Asp Leu Asn Leu Thr Ser Gly Glu  
                   85                  90                  95  
 Ile Val Tyr Leu Leu Glu Lys Ile Asp Thr Asp Trp Tyr Arg Gly Asn  
                   100                  105                  110  
 Cys Arg Asn Gln Ile Gly Ile Phe Pro Ala Asn Tyr Val Lys Val Ile  
                   115                  120                  125

Ile Asp Ile Pro Glu Gly Gly Asn Gly Lys Arg Glu Cys Val Ser Ser  
 130 135 140  
 His Cys Val Lys Gly Ser Arg Cys Val Ala Arg Phe Glu Tyr Ile Gly  
 145 150 155 160  
 Glu Gln Lys Asp Glu Leu Ser Phe Ser Glu Gly Glu Ile Ile Ile Leu  
 165 170 175  
 Lys Glu Tyr Val Asn Glu Glu Trp Ala Arg Gly Glu Val Arg Gly Arg  
 180 185 190  
 Thr Gly Ile Phe Pro Leu Asn Phe Val Glu Pro Val Glu Asp Tyr Pro  
 195 200 205  
 Thr Ser Gly Ala Asn Val Leu Ser Thr Lys Val Pro Leu Lys Thr Lys  
 210 215 220  
 Lys Glu Asp Ser Gly Ser Asn Ser Gln Val Asn Ser Leu Pro Ala Glu  
 225 230 235 240  
 Trp Cys Glu Ala Leu His Ser Phe Thr Ala Glu Thr Ser Asp Asp Leu  
 245 250 255  
 Ser Phe Lys Arg Gly Asp Arg Ile Gln Ile Leu Glu Arg Leu Asp Ser  
 260 265 270  
 Asp Trp Cys Arg Gly Arg Leu Gln Asp Arg Glu Gly Ile Phe Pro Ala  
 275 280 285  
 Val Phe Val Arg Pro Cys Pro Ala Glu Ala Lys Ser Met Leu Ala Ile  
 290 295 300  
 Val Pro Lys Gly Arg Lys Ala Lys Ala Leu Tyr Asp Phe Arg Gly Glu  
 305 310 315 320  
 Asn Glu Asp Glu Leu Ser Phe Lys Ala Gly Asp Ile Ile Thr Glu Leu  
 325 330 335  
 Glu Ser Val Asp Asp Asp Trp Met Ser Gly Glu Leu Met Gly Lys Ser  
 340 345 350  
 Gly Ile Phe Pro Lys Asn Tyr Ile Gln Phe Leu Gln Ile Ser  
 355 360 365

&lt;210&gt; 139

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 139

Met Asn Pro Tyr Ile Ser Ile Ile Val Phe Ile Val Phe Leu Cys Ser  
 1 5 10 15  
 Glu Asn Tyr Pro Trp Asn Asn Met Leu Arg Ile Thr Gly Ser Ser Pro  
 20 25 30

Tyr Leu His Phe Leu Ser Val Leu Gly Val Leu Val Asn Ser Tyr Val  
                   35                  40                  45

Leu Ile Leu Phe Asn Ser Glu Phe Leu Thr Gln His Phe Arg Glu Arg  
           50                  55                  60

Ile Gln Ala Gly  
       65

<210> 140

<211> 28

<212> PRT

<213> Homo sapiens

<400> 140

Phe Phe Phe Phe Phe Phe Leu Leu Leu Lys Phe Phe Phe Asn Lys Asp  
       1                  5                  10                  15

Lys Gly Phe Asn Asn Phe Cys Ala Thr Ile Leu Asn  
                   20                  25

<210> 141

<211> 22

<212> PRT

<213> Homo sapiens

<400> 141

Glu Gly Thr Thr Arg Lys Lys Asp Lys Tyr Ile Leu Ser Leu Glu Asn  
       1                  5                  10                  15

Ala Ser Arg Gln Lys Tyr  
                   20

<210> 142

<211> 46

<212> PRT

<213> Homo sapiens

<400> 142

Met Pro Phe Leu Arg Lys Phe Asp Arg Leu Val Arg Thr Ser Asp His  
       1                  5                  10                  15

Gln Ile Ser Leu Lys Trp Val Ser Trp Asn Phe Ile Phe Asp Asn Ile  
                   20                  25                  30

Tyr Thr Ile Pro Asn Ser Phe Ala Val Leu Arg Phe Val Gly  
           35                  40                  45

<210> 143

<211> 56

<212> PRT

<213> Homo sapiens

<400> 143

Met Glu Gly Trp Gly Met Ser Ser Ile Asn Pro Tyr Gly Met His Ser  
 1 5 10 15  
 Gln Trp Pro Ser His Leu Gly Leu Glu Pro Leu Val Gln Gly Leu Gly  
 20 25 30  
 Glu Asn Arg Pro His Gly Asn Ser His Thr Val Ile Ala Phe Asn Thr  
 35 40 45  
 Glu Pro Arg Val Pro Lys Gln Gln  
 50 55

<210> 144  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 144  
 Met Asn Ile Ser Thr Gln Gly Arg Ala Lys Gly Val Pro Arg Ile Leu  
 1 5 10 15  
 Leu Ala Lys Gly Gln Val Leu Ile Glu Gly Leu Glu Leu Ser Arg Phe  
 20 25 30  
 Met Glu Ala Ala Cys Thr Leu Gly Ala Cys Pro Asp Ser Ser Leu Gly  
 35 40 45  
 Phe Pro Phe Tyr Leu Ser Ser Phe  
 50 55

<210> 145  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 145  
 Met Pro Lys Gly Lys Ala Phe Arg Arg Thr Leu Arg Ile Thr Ser Leu  
 1 5 10 15  
 Phe Phe Ser Ser Leu Leu Leu Leu Gln Leu Leu Phe Gly His His Leu  
 20 25 30  
 Leu Val Leu Val Ser Pro Gln Leu Pro Gly Ala Val Phe Glu Gly Glu  
 35 40 45  
 Ala Phe Ser Val Pro Pro Pro Gln Ala Leu Pro Met Met Ala Pro Ser  
 50 55 60  
 His His Pro Ser Pro Ala Pro Leu Pro Ala Ser Pro Pro Pro Pro Ala  
 65 70 75 80  
 Pro Pro Pro Pro Trp Arg Arg Arg Gly Ile Pro Leu Ala Phe Gly Leu  
 85 90 95  
 Pro Arg Ser Arg Arg Leu Pro Glu Leu Pro Gln Pro Arg  
 100 105

<210> 146  
 <211> 247  
 <212> PRT  
 <213> Homo sapiens

<400> 146

Arg	Pro	Ala	Pro	Ala	Pro	Arg	Cys	Gln	Leu	Pro	Gln	Arg	Pro	Ala	Glu
1				5					10					15	
Ala	Arg	Cys	Met	Leu	Ser	Arg	Cys	Arg	Ser	Arg	Leu	Leu	His	Val	Leu
			20					25					30		
Gly	Leu	Ser	Phe	Leu	Leu	Gln	Thr	Arg	Arg	Pro	Ile	Leu	Leu	Cys	Ser
		35					40					45			
Pro	Arg	Leu	Met	Lys	Pro	Leu	Val	Val	Phe	Val	Leu	Gly	Gly	Pro	Gly
	50					55					60				
Ala	Gly	Lys	Gly	Thr	Gln	Cys	Ala	Arg	Ile	Val	Glu	Lys	Tyr	Gly	Tyr
65					70					75					80
Thr	His	Leu	Ser	Ala	Gly	Glu	Leu	Leu	Arg	Asp	Glu	Arg	Lys	Asn	Pro
				85					90					95	
Asp	Ser	Gln	Tyr	Gly	Glu	Leu	Ile	Glu	Lys	Tyr	Ile	Lys	Glu	Gly	Lys
			100					105					110		
Ile	Val	Pro	Val	Glu	Ile	Thr	Ile	Ser	Leu	Leu	Lys	Arg	Glu	Met	Asp
		115					120					125			
Gln	Thr	Met	Ala	Ala	Asn	Ala	Gln	Lys	Asn	Lys	Phe	Leu	Ile	Asp	Gly
		130				135					140				
Phe	Pro	Arg	Asn	Gln	Asp	Asn	Leu	Gln	Gly	Trp	Asn	Lys	Thr	Met	Asp
145					150					155					160
Gly	Lys	Ala	Asp	Val	Ser	Phe	Val	Leu	Phe	Phe	Asp	Cys	Asn	Asn	Glu
			165						170					175	
Ile	Cys	Ile	Glu	Arg	Cys	Leu	Glu	Arg	Gly	Lys	Ser	Ser	Gly	Arg	Ser
			180					185					190		
Asp	Asp	Asn	Arg	Glu	Ser	Leu	Glu	Lys	Arg	Ile	Gln	Thr	Tyr	Leu	Gln
		195					200					205			
Ser	Thr	Lys	Pro	Ile	Ile	Asp	Leu	Tyr	Glu	Glu	Met	Gly	Lys	Val	Lys
	210					215					220				
Lys	Ile	Asp	Ala	Ser	Lys	Ser	Val	Asp	Glu	Val	Phe	Asp	Glu	Val	Val
225					230					235					240
Gln	Ile	Phe	Asp	Lys	Glu	Gly									
				245											

<210> 147



<211> 181  
 <212> PRT  
 <213> Homo sapiens

<400> 147

Ile	Pro	Asn	Met	Ala	Ala	Pro	Leu	Gly	Gly	Met	Phe	Ser	Gly	Gln	Pro
1				5					10					15	
Pro	Gly	Pro	Pro	Gln	Ala	Pro	Pro	Gly	Leu	Pro	Gly	Gln	Ala	Ser	Leu
			20					25					30		
Leu	Gln	Ala	Ala	Pro	Gly	Ala	Pro	Arg	Pro	Ser	Ser	Ser	Thr	Leu	Val
		35					40					45			
Asp	Glu	Leu	Glu	Ser	Ser	Phe	Glu	Ala	Cys	Phe	Ala	Ser	Leu	Val	Ser
	50					55					60				
Gln	Asp	Tyr	Val	Asn	Gly	Thr	Asp	Gln	Glu	Glu	Ile	Arg	Thr	Gly	Val
65					70					75					80
Asp	Gln	Cys	Ile	Gln	Lys	Phe	Leu	Asp	Ile	Ala	Arg	Gln	Thr	Glu	Cys
				85					90					95	
Phe	Phe	Leu	Gln	Lys	Arg	Leu	Gln	Leu	Ser	Val	Gln	Lys	Pro	Glu	Gln
		100					105						110		
Val	Ile	Lys	Glu	Asp	Val	Ser	Glu	Leu	Arg	Asn	Glu	Leu	Gln	Arg	Lys
		115					120					125			
Asp	Ala	Leu	Val	Gln	Lys	His	Leu	Thr	Lys	Leu	Arg	His	Trp	Gln	Gln
	130					135					140				
Val	Leu	Glu	Asp	Ile	Asn	Val	Gln	His	Lys	Lys	Pro	Ala	Asp	Ile	Pro
145					150					155					160
Gln	Gly	Ser	Leu	Ala	Tyr	Leu	Glu	Gln	Ala	Ser	Ala	Asn	Ile	Pro	Ala
			165					170						175	
Pro	Leu	Lys	Pro	Thr											
			180												

<210> 148  
 <211> 236  
 <212> PRT  
 <213> Homo sapiens

<400> 148

Met	Leu	Arg	Asp	Leu	Gln	Leu	Gln	Ile	Leu	Arg	Asn	Val	Thr	His	His
1				5					10					15	
Val	Ser	Val	Thr	Lys	Gln	Leu	Pro	Thr	Ser	Glu	Ala	Val	Val	Ser	Ala
			20					25					30		
Val	Ser	Glu	Ala	Gly	Ala	Ser	Gly	Ile	Thr	Glu	Ala	Gln	Ala	Arg	Ala
		35					40					45			
Ile	Val	Asn	Ser	Ala	Leu	Lys	Leu	Tyr	Ser	Gln	Asp	Lys	Thr	Gly	Met

50	55	60
Val Asp Phe Ala Leu Glu Ser Gly Gly Gly Ser Ile Leu Ser Thr Arg		
65	70	75 80
Cys Ser Glu Thr Tyr Glu Thr Lys Thr Ala Leu Met Ser Leu Phe Gly		
	85	90 95
Ile Pro Leu Trp Tyr Phe Ser Gln Ser Pro Arg Val Val Ile Gln Pro		
	100	105 110
Asp Ile Tyr Pro Gly Asn Cys Trp Ala Phe Lys Gly Ser Gln Gly Tyr		
	115	120 125
Leu Val Val Arg Leu Ser Met Met Ile His Pro Ala Ala Phe Thr Leu		
	130	135 140
Glu His Ile Pro Lys Thr Leu Ser Pro Thr Gly Asn Ile Ser Ser Ala		
145	150	155 160
Pro Lys Asp Phe Ala Val Tyr Gly Leu Glu Asn Glu Tyr Gln Glu Glu		
	165	170 175
Gly Gln Leu Leu Gly Gln Phe Thr Tyr Asp Gln Asp Gly Glu Ser Leu		
	180	185 190
Gln Met Phe Gln Ala Leu Lys Arg Pro Asp Asp Thr Ala Phe Gln Ile		
	195	200 205
Val Glu Leu Arg Ile Phe Ser Asn Trp Gly His Pro Glu Tyr Thr Cys		
	210	215 220
Leu Tyr Arg Phe Arg Val His Gly Glu Pro Val Lys		
225	230	235

&lt;210&gt; 149

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 149

Met Glu Trp Ser Pro Ser Ala Ser Leu Phe Asn Pro His Ile Trp Ser		
1	5	10 15
Thr Arg Val Asp Leu Trp Leu Thr Thr Tyr Thr Met Leu Lys Ser Ser		
	20	25 30
Ala Thr Ala Thr Thr Ser Cys Gln Lys Val Ser Leu Ala Asn Lys Gln		
	35	40 45
Leu Lys Phe Lys Gly Arg Ser Lys Ser		
50	55	

&lt;210&gt; 150

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 150

Met His Leu Ala Leu Thr Ser Tyr Ser Ile Leu Pro Val Thr Val Val  
 1 5 10 15

Lys Ser Arg Ser Lys Ile Asn Lys Thr Phe Leu Thr Asn Ser Cys Thr  
 20 25 30

Ile Phe Ser Phe Val Leu Pro Val Asp Glu Lys Ser Gly Leu Arg Gln  
 35 40 45

Ala Ser Tyr Phe  
 50

&lt;210&gt; 151

&lt;211&gt; 377

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 151

Leu Arg Arg Phe Pro Ala Gln Ser Ser Pro Ala Pro Arg Arg Ala Pro  
 1 5 10 15

Glu Gln Arg Pro Pro Ala Gly Pro Ala Ser Ala Trp Ser Ser Ser Tyr  
 20 25 30

Pro His Ala Pro Tyr Leu Gly Ser Ala Arg Ser Leu Ser Pro His Lys  
 35 40 45

Met Ala Asp Gly Gly Ser Pro Phe Leu Gly Arg Arg Asp Phe Val Tyr  
 50 55 60

Pro Ser Ser Thr Arg Asp Pro Ser Ala Ser Asn Gly Gly Gly Ser Pro  
 65 70 75 80

Ala Arg Arg Glu Glu Lys Lys Arg Lys Ala Ala Arg Leu Lys Phe Asp  
 85 90 95

Phe Gln Ala Gln Ser Pro Lys Glu Leu Thr Leu Gln Lys Gly Asp Ile  
 100 105 110

Val Tyr Ile His Lys Glu Val Asp Lys Asn Trp Leu Glu Gly Glu His  
 115 120 125

His Gly Arg Leu Gly Ile Phe Pro Ala Asn Tyr Val Glu Val Leu Pro  
 130 135 140

Ala Asp Glu Ile Pro Lys Pro Ile Lys Pro Pro Thr Tyr Gln Val Leu  
 145 150 155 160

Glu Tyr Gly Glu Ala Val Ala Gln Tyr Thr Phe Lys Gly Asp Leu Glu  
 165 170 175

Val Glu Leu Ser Phe Arg Lys Gly Glu His Ile Cys Leu Ile Arg Lys  
 180 185 190

Val Asn Glu Asn Trp Tyr Glu Gly Arg Ile Thr Gly Thr Gly Arg Gln  
 195 200 205  
 Gly Ile Phe Pro Ala Ser Tyr Val Gln Val Ser Arg Glu Pro Arg Leu  
 210 215 220  
 Arg Leu Cys Asp Asp Gly Pro Gln Leu Pro Thr Ser Pro Arg Leu Thr  
 225 230 235 240  
 Ala Ala Ala Arg Ser Ala Arg Asp Pro Ser Ala Pro Ser Ala Leu Arg  
 245 250 255  
 Ser Pro Ala Asp Pro Thr Asp Leu Gly Gly Gln Thr Ser Pro Arg Arg  
 260 265 270  
 Thr Gly Phe Ser Phe Pro Thr Gln Glu Pro Arg Pro Gln Thr Gln Asn  
 275 280 285  
 Leu Gly Thr Pro Gly Pro Ala Leu Ser His Ser Arg Gly Pro Ser His  
 290 295 300  
 Pro Leu Asp Leu Gly Thr Ser Ser Pro Asn Thr Ser Gln Ile His Trp  
 305 310 315 320  
 Thr Pro Tyr Arg Ala Met Tyr Gln Tyr Arg Pro Gln Asn Glu Asp Glu  
 325 330 335  
 Leu Glu Leu Arg Glu Gly Asp Arg Val Asp Val Met Gln Gln Cys Asp  
 340 345 350  
 Asp Gly Trp Phe Val Gly Val Ser Arg Arg Thr Gln Lys Phe Gly Thr  
 355 360 365  
 Phe Pro Gly Asn Tyr Val Ala Pro Val  
 370 375

&lt;210&gt; 152

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 152

Trp Asp Pro Thr Leu Ser Pro Val Gly Val Leu Gly Pro Gly Ser Ile  
 1 5 10 15

Leu Gly Cys Gly Pro Gly Lys Gly Ser Pro Gly Ala Lys  
 20 25

&lt;210&gt; 153

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 153

Met Gln Glu Ala Met Val Lys Thr His Phe His Pro Thr Ser Arg Arg  
 1 5 10 15

Ser Leu Ala Tyr His Thr Leu Leu Pro Ile Pro Ser Glu Pro Leu Phe  
                   20                  25                  30

Ala Ala Pro Gly Glu His Leu His Gln Cys Phe Val Lys Glu Ser Tyr  
                   35                  40                  45

Cys Pro Pro Arg Val Leu Ala Lys Glu Gln  
                   50                  55

<210> 154

<211> 41

<212> PRT

<213> Homo sapiens

<400> 154

Gly Gly Glu Pro Gly Leu Arg Gly Ser Gly Thr Arg Pro Cys Leu Gln  
           1                  5                  10                  15

Trp Ala Ser Trp Ala Pro Ala Leu Phe Trp Ala Ala Gly Leu Gly Arg  
                   20                  25                  30

Ala Arg Arg Val Pro Asn Glu Leu Ser  
                   35                  40

<210> 155

<211> 75

<212> PRT

<213> Homo sapiens

<400> 155

Met Met Leu Gly Ser Leu Ala Pro Asp Pro Gly Ser Arg Arg His Ser  
           1                  5                  10                  15

Gly Gln Ala Ala Leu Arg Pro Arg Arg Tyr Pro Thr Leu Trp Asp Arg  
                   20                  25                  30

Cys Arg Lys Arg Trp Leu Arg Pro Ile Phe Thr Gln Leu Leu Ala Ala  
                   35                  40                  45

Val Trp Leu Thr Thr Arg Ser Ser Pro Phe Pro Val Ser Arg Phe Leu  
                   50                  55                  60

Gln His Gln Ala Asn Thr Tyr Thr Ser Ala Leu  
           65                  70                  75

<210> 156

<211> 50

<212> PRT

<213> Homo sapiens

<400> 156

Gly Ala Ser Arg Ala Cys Ala Val Val Gly Pro Asp Pro Val Ser Ser  
           1                  5                  10                  15

Gly Arg Leu Gly Pro Arg Leu Tyr Ser Gly Leu Arg Ala Trp Glu Gly  
                   20                  25                  30

Leu Ala Gly Cys Gln Met Ser Cys Pro Asn Ser Ala Gly Leu Gln Leu  
           35                  40                  45

Pro Ala  
       50

<210> 157

<211> 97

<212> PRT

<213> Homo sapiens

<400> 157

Gly Thr Pro Gly Pro Tyr Pro Gly Pro Leu Ser Pro Pro Pro Glu Ala  
       1                  5                  10                  15

Pro Pro Leu Glu Ser Ala Glu Pro Leu Gly Pro Ala Ala Asp Leu Trp  
           20                  25                  30

Ala Asp Val Asp Leu Thr Glu Phe Asp Gln Tyr Leu Asn Cys Ser Arg  
           35                  40                  45

Thr Arg Pro Asp Ala Pro Gly Leu Pro Tyr His Val Ala Leu Ala Lys  
           50                  55                  60

Leu Gly Pro Arg Ala Met Ser Cys Pro Glu Glu Ser Ser Leu Ile Ser  
       65                  70                  75                  80

Ala Leu Ser Asp Ala Ser Ser Ala Val Tyr Tyr Ser Ala Cys Ile Ser  
           85                  90                  95

Gly

<210> 158

<211> 173

<212> PRT

<213> Homo sapiens

<400> 158

Gly Leu Phe Pro Ala Val Cys Pro Trp Pro Ala Leu Asp Leu Leu Ser  
       1                  5                  10                  15

Gly Pro Gln Trp Gln Arg Gly Pro Gly Pro Gly Ala Gly Val Gly Asp  
           20                  25                  30

Pro Gly Leu Ser Ala Val Ala Phe Trp Trp Gly Ala Met Glu Thr Gly  
           35                  40                  45

Asn Gln Ala Val Gly Ser Gln Arg Trp Ser Leu Arg Gly Glu Trp Arg  
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Ala Phe Cys Phe Cys Leu Val Pro Pro His Gly Thr Trp Phe Pro Gly  
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<210> 159
<211> 109
<212> PRT
<213> Homo sapiens
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<210> 160
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<400> 160
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Ala Ala Arg Arg Gly Ser Ala Pro Pro Thr Thr Pro Thr Ala Glu Asp

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Ser Ser Glu Trp Leu His Ala Ala Ala Cys Val His Leu Pro Ser		
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Thr Gln Asp Ser Pro Arg Gln Gln Leu Val Phe Thr Cys Pro Pro Pro		
85	90	95
Arg Thr Val Pro Gly Leu Ala Pro Gly Cys Arg Gly Ser Ala Glu Gly		
100	105	110
Ala Ser Cys Pro Ile Ser Leu Ala Asn Ser Leu Leu Leu Gly Pro		
115	120	125
His Lys Arg His Gly Arg Met Phe Leu Ile Arg Gln Glu His Arg Thr		
130	135	140
Pro Asn Pro Ser Leu Cys Leu Ala		
145	150	

&lt;210&gt; 161

&lt;211&gt; 3096

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 161

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&lt;210&gt; 162

&lt;211&gt; 1987

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 162

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<210> 163

<211> 1107

<212> DNA

<213> Homo sapiens

<400> 163

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<210> 164

<211> 1062

<212> DNA

<213> Homo sapiens

<400> 164

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&lt;210&gt; 165

&lt;211&gt; 2770

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 165

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&lt;210&gt; 166

&lt;211&gt; 4242

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 166

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 168

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&lt;213&gt; Homo sapiens

&lt;400&gt; 169

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<213> Homo sapiens

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3450

&lt;210&gt; 177

&lt;211&gt; 874

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 177

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&lt;210&gt; 178

&lt;211&gt; 3265

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 178

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<210> 179

<211> 262

<212> PRT

<213> Homo sapiens

<400> 179

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Ser Leu Cys Val Phe Pro Ser Ser Ala Ala Ser Phe Leu Ser Phe Leu
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```

```

Ala Leu Val Val Ala Ala Thr Met Asn Lys Lys Lys Lys Pro Phe Leu
      20              25              30

```

```

Gly Met Pro Ala Pro Leu Gly Tyr Val Pro Gly Leu Gly Arg Gly Ala
  35              40              45

```

```

Thr Gly Phe Thr Thr Arg Ser Asp Ile Gly Pro Ala Arg Asp Ala Asn
  50              55              60

```

```

Asp Pro Val Asp Asp Arg His Ala Pro Pro Gly Lys Arg Thr Val Gly
  65              70              75              80

```

```

Asp Gln Met Lys Lys Asn Gln Ala Ala Asp Asp Asp Asp Glu Asp Leu
      85              90              95

```

```

Asn Asp Thr Asn Tyr Asp Glu Phe Asn Gly Tyr Ala Gly Ser Leu Phe
 100              105              110

```

Ser Ser Gly Pro Tyr Glu Lys Asp Asp Glu Glu Ala Asp Ala Ile Tyr  
 115 120 125  
 Ala Ala Leu Asp Lys Arg Met Asp Glu Arg Arg Lys Glu Arg Arg Glu  
 130 135 140  
 Gln Arg Glu Lys Glu Glu Ile Glu Lys Tyr Arg Met Glu Arg Pro Lys  
 145 150 155 160  
 Ile Gln Gln Gln Phe Ser Asp Leu Lys Arg Lys Leu Ala Glu Val Thr  
 165 170 175  
 Glu Glu Glu Trp Leu Ser Ile Pro Glu Val Gly Asp Ala Arg Asn Lys  
 180 185 190  
 Arg Gln Arg Asn Pro Arg Tyr Glu Lys Leu Thr Pro Val Pro Asp Ser  
 195 200 205  
 Phe Phe Ala Lys His Leu Gln Thr Gly Glu Asn His Thr Ser Val Asp  
 210 215 220  
 Pro Arg Gln Thr Gln Phe Gly Gly Leu Asn Thr Pro Tyr Pro Gly Gly  
 225 230 235 240  
 Leu Asn Thr Pro Tyr Pro Gly Gly Met Thr Pro Gly Leu Met Thr Pro  
 245 250 255  
 Gly Thr Val Ser Trp Thr  
 260

<210> 180  
 <211> 467  
 <212> PRT  
 <213> Homo sapiens

<400> 180

His Thr Leu Ser Arg Trp Thr Lys His Ser Ile Pro Arg Trp Asn Asp  
 1 5 10 15  
 Ala Arg Thr Asp Asp Thr Trp His Ser Glu Leu Asp Met Arg Lys Ile  
 20 25 30  
 Gly Gln Ala Arg Asn Thr Leu Met Asp Met Arg Leu Ser Gln Val Ser  
 35 40 45  
 Asp Ser Val Ser Gly Gln Thr Val Val Asp Pro Lys Gly Tyr Leu Thr  
 50 55 60  
 Asp Leu Asn Ser Met Ile Pro Thr His Gly Gly Asp Ile Asn Asp Ile  
 65 70 75 80  
 Lys Lys Ala Arg Leu Leu Lys Ser Val Arg Glu Thr Asn Pro His  
 85 90 95  
 His Pro Pro Ala Trp Ile Ala Ser Ala Arg Leu Glu Glu Val Thr Gly  
 100 105 110

Lys	Leu	Gln	Val	Ala	Arg	Asn	Leu	Ile	Met	Lys	Gly	Thr	Glu	Met	Cys	115	120	125
Pro	Lys	Ser	Glu	Asp	Val	Trp	Leu	Glu	Ala	Ala	Arg	Leu	Gln	Pro	Gly	130	135	140
Asp	Thr	Ala	Lys	Ala	Val	Val	Ala	Gln	Ala	Val	Arg	His	Leu	Pro	Gln	145	150	155
Ser	Val	Arg	Ile	Tyr	Ile	Arg	Ala	Ala	Glu	Leu	Glu	Thr	Asp	Ile	Arg	165	170	175
Ala	Lys	Lys	Arg	Val	Leu	Arg	Lys	Ala	Leu	Glu	His	Val	Pro	Asn	Ser	180	185	190
Val	Arg	Leu	Trp	Lys	Ala	Ala	Val	Glu	Leu	Glu	Glu	Pro	Glu	Asp	Ala	195	200	205
Arg	Ile	Met	Leu	Ser	Arg	Ala	Val	Glu	Cys	Cys	Pro	Thr	Ser	Val	Glu	210	215	220
Leu	Trp	Leu	Ala	Leu	Ala	Arg	Leu	Glu	Thr	Tyr	Glu	Asn	Ala	Arg	Lys	225	230	235
Val	Leu	Asn	Lys	Ala	Arg	Glu	Asn	Ile	Pro	Thr	Asp	Arg	His	Ile	Trp	245	250	255
Ile	Thr	Ala	Ala	Lys	Leu	Glu	Glu	Ala	Asn	Gly	Asn	Thr	Gln	Met	Val	260	265	270
Glu	Lys	Ile	Ile	Asp	Arg	Ala	Ile	Thr	Ser	Leu	Arg	Ala	Asn	Gly	Val	275	280	285
Glu	Ile	Asn	Arg	Glu	Gln	Trp	Ile	Gln	Asp	Ala	Glu	Glu	Cys	Asp	Arg	290	295	300
Ala	Gly	Ser	Val	Ala	Thr	Cys	Gln	Ala	Val	Met	Arg	Ala	Val	Ile	Gly	305	310	315
Ile	Gly	Ile	Glu	Glu	Glu	Asp	Arg	Lys	His	Thr	Trp	Met	Glu	Asp	Ala	325	330	335
Asp	Ser	Cys	Val	Ala	His	Asn	Ala	Leu	Glu	Cys	Ala	Arg	Ala	Ile	Tyr	340	345	350
Ala	Tyr	Ala	Leu	Gln	Val	Phe	Pro	Ser	Lys	Lys	Ser	Val	Trp	Leu	Arg	355	360	365
Ala	Ala	Tyr	Phe	Glu	Lys	Asn	His	Gly	Thr	Arg	Glu	Ser	Leu	Glu	Ala	370	375	380
Leu	Leu	Gln	Arg	Ala	Val	Ala	His	Cys	Pro	Lys	Ala	Glu	Val	Leu	Trp	385	390	395
Leu	Met	Gly	Ala	Lys	Ser	Lys	Trp	Leu	Ala	Gly	Asp	Val	Pro	Ala	Ala	405	410	415
Arg	Ser	Ile	Leu	Ala	Leu	Ala	Phe	Gln	Ala	Asn	Pro	Asn	Ser	Glu	Glu			

420					425					430					
Ile	Trp	Leu	Ala	Ala	Val	Lys	Leu	Glu	Ser	Glu	Asn	Asp	Glu	Tyr	Glu
		435					440					445			
Arg	Ala	Arg	Arg	Leu	Leu	Ala	Lys	Ala	Arg	Thr	Val	Pro	Pro	Pro	Pro
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Gly Cys Ser															
465															
<210> 181															
<211> 284															
<212> PRT															
<213> Homo sapiens															
<400> 181															
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Thr	Ala	Arg	Val	Phe	Met	Lys	Ser	Val	Lys	Leu	Glu	Trp	Val	Gln	Asp
			20					25					30		
Asn	Ile	Arg	Ala	Ala	Gln	Asp	Leu	Cys	Glu	Glu	Ala	Leu	Arg	His	Tyr
		35					40					45			
Glu	Asp	Phe	Pro	Lys	Leu	Trp	Met	Met	Lys	Gly	Gln	Ile	Glu	Glu	Gln
	50					55					60				
Lys	Glu	Met	Met	Glu	Lys	Ala	Arg	Glu	Ala	Tyr	Asn	Gln	Gly	Leu	Lys
	65			70					75					80	
Lys	Cys	Pro	His	Ser	Thr	Pro	Leu	Trp	Leu	Leu	Leu	Ser	Arg	Leu	Glu
			85					90						95	
Glu	Lys	Ile	Gly	Gln	Leu	Thr	Arg	Ala	Arg	Ala	Ile	Leu	Glu	Lys	Ser
			100				105					110			
Arg	Leu	Lys	Asn	Pro	Lys	Asn	Pro	Gly	Leu	Trp	Leu	Glu	Ser	Val	Arg
		115					120					125			
Leu	Glu	Tyr	Arg	Ala	Gly	Leu	Lys	Asn	Ile	Ala	Asn	Thr	Leu	Met	Ala
	130					135					140				
Lys	Ala	Leu	Gln	Glu	Cys	Pro	Asn	Ser	Gly	Ile	Leu	Trp	Ser	Glu	Ala
	145					150			155					160	
Ile	Phe	Leu	Glu	Ala	Arg	Pro	Gln	Arg	Arg	Thr	Lys	Ser	Val	Asp	Ala
			165					170						175	
Leu	Lys	Lys	Cys	Glu	His	Asp	Pro	His	Val	Leu	Leu	Ala	Val	Ala	Lys
			180				185						190		
Leu	Phe	Trp	Ser	Gln	Arg	Lys	Ile	Thr	Lys	Ala	Arg	Glu	Trp	Phe	His
	195					200						205			
Arg Thr Val Lys Ile Asp Ser Asp Leu Gly Asp Ala Trp Ala Phe Phe															

210	215	220
Tyr Lys Phe Glu Leu Gln His Gly Thr Glu Glu Gln Gln Glu Glu Val		
225	230	235 240
Arg Lys Arg Cys Glu Ser Ala Glu Pro Arg His Gly Glu Leu Trp Cys		
	245	250 255
Ala Val Ser Lys Asp Ile Ala Asn Trp Gln Lys Lys Ile Gly Asp Ile		
	260	265 270
Leu Arg Leu Val Ala Gly Arg Ile Lys Asn Thr Phe		
	275	280

<210> 182  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 182																	
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Tyr Gly Gln Gly Phe Leu Gly Gln Asp Ser His Gln His Ile Thr His																	
			20				25									30	
Val Leu Leu Gly Arg Glu Lys Gln Tyr Ile Pro Val Glu Arg Ser Gln																	
			35				40								45		
Ser Ile Ser Gly Arg Asn Val Val Lys Gly Gly Arg Cys Tyr Ala Ala																	
			50				55								60		
Ala Pro Ser Val Pro Glu Val Ala Val Ile Pro																	
			65				70								75		

<210> 183  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 183																	
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1				5					10							15	
Glu Phe Gln Arg Arg Leu Leu Leu Lys Cys Leu Leu Ala Ala Gln Tyr																	
			20					25								30	
Gln Ser Ile Asn Tyr Pro Phe Trp Gly Leu Ala Leu Glu Ile Ile Phe																	
			35				40								45		
Val Gly Arg Pro Asn Ser Ser Gln Gln Gly Ser Gln Ala Cys Leu Leu																	
			50				55							60			
Asp Leu Phe Pro Leu Arg Gly Arg Asn Glu Leu																	
			65				70							75			

<210> 184  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 184  
 Gln Gly Thr Arg His Pro Gln Ser Leu Ser His Lys Pro Ala Lys Lys  
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 Ile Asp Val Ala Arg Val Thr Phe Asp Leu Tyr Lys Leu Asn Pro Gln  
                   20                  25                  30  
 Asp Phe Ile Gly Cys Leu Asn Val Lys Ala Thr Phe Tyr Asp Thr Tyr  
           35                  40                  45  
 Ser Leu Ser Tyr Asp Leu His Cys Cys Gly Ala Lys Arg Ile Met Lys  
   50                  55                  60  
 Glu Ala Phe Arg Trp Ala Leu Phe Ser Met Gln Ala Thr Gly His Val  
   65                  70                  75                  80  
 Leu Leu Gly Thr Ser Cys Tyr Leu Gln Gln Leu Leu Asp Ala Thr Glu  
                   85                  90                  95  
 Glu Gly Gln Pro Pro Lys Gly Lys Ala Ser Ser Leu Ile Pro Thr Cys  
           100                  105                  110  
 Leu Lys Ile Leu Gln  
           115

<210> 185  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 185  
 Lys Ser Ala Ala Gln Thr Ala Met Thr Thr Pro Pro Gln Thr Pro Pro  
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 His Pro Tyr Phe Ile Asn Arg Gln Asp Phe Pro Cys Ile Leu Leu Arg  
           20                  25                  30  
 Ile Ser Ser Ser His Ser Pro Ala Pro Ser Pro Met Ser Trp Leu His  
           35                  40                  45  
 His Cys Lys Thr Asp Leu Leu Gln Gly Ser Gln Lys Leu Leu Leu Ala  
   50                  55                  60  
 Leu Tyr His Phe Tyr Pro His Leu Pro Pro Glu Thr Ala Thr Ile His  
   65                  70                  75                  80  
 Ser His Cys Pro Ser Ala Leu Arg Pro Ser Ser Arg Ala Asp Gly Ser  
           85                  90                  95  
 Met Val Ile Leu Ser Trp Val Val Leu Leu Lys Pro Ser Gln Gly Ala  
           100                  105                  110

Asp Ser Gln Arg Ala Ser Arg Val Ser Gly Leu Asp Asp Ser Lys Glu  
           115                          120                          125

Gly Thr Pro Ile Phe Ile Phe Lys Thr Asp Ile Pro Arg Gly Phe  
       130                          135                          140

<210> 186

<211> 84

<212> PRT

<213> Homo sapiens

<400> 186

Thr Gln Thr Arg His Phe Gln Leu Ala Thr Gln Ser Gly Arg Ala Gly  
       1                          5                          10                          15

Gly Asn Thr Asp Leu Asp Ile His Lys Lys Ile Lys Pro Lys Ile Lys  
                           20                          25                          30

His Ser Ile Leu Cys Pro Leu Lys Gly Leu Ile Lys Gly Thr Gln Ser  
                           35                          40                          45

Pro Pro Arg Ser Pro Leu Pro Cys Gln His His Lys Ala Ser Ser Ala  
       50                          55                          60

His Thr Lys Gly Leu Gly Arg Gly Ile Leu Leu Pro Pro His Gln Pro  
       65                          70                          75                          80

Gln Glu Trp Thr

<210> 187

<211> 114

<212> PRT

<213> Homo sapiens

<400> 187

Arg His Trp Gly Phe Thr Ala Ser Ile Phe Ser Leu Lys Arg Phe Ile  
       1                          5                          10                          15

Thr Ser Thr Ser Lys Glu Gln Thr Asn Trp Arg Asn Val Cys Phe Phe  
                           20                          25                          30

Phe Leu Phe Ile Lys Phe Tyr Ser Thr Ala Lys Phe Gln Ile Ser Phe  
                           35                          40                          45

Thr Tyr Arg Pro Cys Lys Gly Thr Val Arg Thr Glu His Leu Phe Tyr  
       50                          55                          60

Leu Arg Asp Lys Gly Val Glu Ile Phe Ser Leu Asn Phe Ile Arg Lys  
       65                          70                          75                          80

Gly Trp Val Gln Trp Leu Met Pro Val Ile Ser Ala Phe Trp Glu Ala  
                           85                          90                          95

Glu Ala Gly Arg Ser Leu Val Ala Arg Ser Leu Arg Pro Ala Trp Ala



100

105

110

Thr Gln

&lt;210&gt; 188

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 188

Asn	Leu	Ile	Asn	Lys	Lys	Lys	Lys	His	Thr	Phe	Leu	Gln	Leu	Val	Cys
1				5					10					15	

Ser	Leu	Leu	Val	Glu	Val	Ile	Asn	Arg	Phe	Lys	Glu	Lys	Ile	Leu	Ala
			20					25						30	

Val	Asn	Pro	Gln	Cys	Leu	Gln	Leu	Phe	Trp	Gln	Asn	Ile	Phe	Lys	Glu
		35					40					45			

Ile	Gln	Gln	Ala	Asn	Phe	Glu	Val	Leu	Met	Lys	Val	Lys	Glu	Gly	Gly
	50					55					60				

Ile	Ser	Ser	Phe	Gly	Arg	Asn	Glu	Lys	Cys	Leu	Thr	Arg	Asp	Ile	Thr
65					70					75				80	

Thr	His	Val	Gly	Ser	Gly	Cys	Phe	Leu	Pro	Lys	Thr	Phe	Arg	Glu	Glu
				85					90					95	

Val Asn

&lt;210&gt; 189

&lt;211&gt; 437

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 189

Lys	Tyr	Glu	Leu	Tyr	Thr	Glu	Asn	Ala	Thr	Thr	Glu	Lys	Thr	Glu	Pro
1				5					10					15	

Asn	Ser	Gln	Glu	Asp	Lys	Asn	Asp	Gly	Gly	Lys	Ser	Arg	Lys	Gly	Asn
			20					25					30		

Ile	Glu	Leu	Ala	Ser	Ser	Glu	Pro	Gln	His	Phe	Thr	Thr	Thr	Val	Thr
		35					40					45			

Arg	Cys	Ser	Pro	Thr	Val	Ala	Phe	Val	Glu	Phe	Pro	Ser	Ser	Pro	Gln
	50					55					60				

Leu	Lys	Asn	Asp	Val	Ser	Glu	Glu	Lys	Asp	Gln	Lys	Lys	Pro	Glu	Asn
65					70					75				80	

Glu	Met	Ser	Gly	Lys	Val	Glu	Leu	Val	Leu	Ser	Gln	Lys	Val	Val	Lys
				85					90					95	

Pro Lys Ser Pro Glu Pro Glu Ala Thr Leu Thr Phe Pro Phe Leu Asp  
 100 105 110  
 Lys Met Pro Glu Ala Asn Gln Leu His Leu Pro Asn Leu Asn Ser Gln  
 115 120 125  
 Val Asp Ser Pro Ser Ser Glu Lys Ser Pro Val Met Thr Pro Phe Lys  
 130 135 140  
 Phe Trp Ala Trp Asp Pro Glu Glu Glu Arg Arg Arg Gln Glu Lys Trp  
 145 150 155 160  
 Gln Gln Glu Gln Glu Arg Leu Leu Gln Glu Arg Tyr Gln Lys Glu Gln  
 165 170 175  
 Asp Lys Leu Lys Glu Glu Trp Glu Lys Ala Gln Lys Glu Val Glu Glu  
 180 185 190  
 Glu Glu Arg Arg Tyr Tyr Glu Glu Glu Arg Lys Ile Ile Glu Asp Thr  
 195 200 205  
 Val Val Pro Phe Thr Val Ser Ser Ser Ser Ala Asp Gln Leu Ser Thr  
 210 215 220  
 Ser Ser Ser Met Thr Glu Gly Ser Gly Thr Met Asn Lys Ile Asp Leu  
 225 230 235 240  
 Gly Asn Cys Gln Asp Glu Lys Gln Asp Arg Arg Trp Lys Lys Ser Phe  
 245 250 255  
 Gln Gly Asp Asp Ser Asp Leu Leu Leu Lys Thr Arg Glu Ser Asp Arg  
 260 265 270  
 Leu Glu Glu Lys Gly Ser Leu Thr Glu Gly Ala Leu Ala His Ser Gly  
 275 280 285  
 Asn Pro Val Ser Lys Gly Val His Glu Asp His Gln Leu Asp Thr Glu  
 290 295 300  
 Ala Gly Ala Pro His Cys Gly Thr Asn Pro Gln Leu Ala Gln Asp Pro  
 305 310 315 320  
 Ser Gln Asn Gln Gln Thr Ser Asn Pro Thr His Ser Ser Glu Asp Val  
 325 330 335  
 Lys Pro Lys Thr Leu Pro Leu Asp Lys Ser Ile Asn His Gln Ile Glu  
 340 345 350  
 Ser Pro Ser Glu Arg Arg Lys Ser Ile Ser Gly Lys Lys Leu Cys Ser  
 355 360 365  
 Ser Cys Gly Leu Pro Leu Gly Lys Gly Ala Ala Met Ile Ile Glu Thr  
 370 375 380  
 Leu Asn Leu Tyr Phe His Ile Gln Cys Phe Arg Cys Gly Ile Cys Lys  
 385 390 395 400  
 Gly Gln Leu Gly Asp Ala Val Ser Gly Thr Asp Val Arg Ile Arg Asn

405

410

415

<400> 190															
Ser 1	Ala	Asn	His	Lys 5	Leu	Glu	Val	Asn	Gly 10	Thr	Asp	Gly	Leu	Ala	Pro
Val	Glu	Val	Glu 20	Glu	Leu	Leu	Arg	Gln 25	Ala	Ser	Glu	Arg	Asn 30	Ser	Lys
Ser	Pro	Thr 35	Glu	Tyr	His	Glu	Pro 40	Val	Tyr	Ala	Asn	Pro 45	Phe	Tyr	Arg
Pro	Thr 50	Thr	Pro	Gln	Arg	Glu 55	Thr	Val	Thr	Pro	Gly 60	Pro	Asn	Phe	Gln
Glu 65	Arg	Ile	Lys	Ile 70	Lys	Thr	Asn	Gly	Leu	Gly 75	Ile	Gly	Val	Asn	Glu 80
Ser	Ile	His	Asn	Met 85	Gly	Asn	Gly	Leu	Ser 90	Glu	Glu	Arg	Gly	Asn 95	Asn
Phe	Asn	His 100	Ile	Ser	Pro	Ile	Pro 105	Pro	Val	Pro	His	Pro 110	Arg	Ser	Val
Ile	Gln 115	Gln	Ala	Glu	Glu	Lys	Leu 120	His	Thr	Pro	Gln	Lys 125	Arg	Leu	Met
Thr 130	Pro	Trp	Glu	Glu	Ser	Asn 135	Val	Met	Gln	Asp	Lys 140	Asp	Ala	Pro	Ser
Pro 145	Lys	Pro	Arg	Leu 150	Ser	Pro	Arg	Glu	Thr	Ile 155	Phe	Gly	Lys	Ser	Glu 160
His	Gln	Asn	Ser	Ser 165	Pro	Thr	Cys	Gln	Glu 170	Asp	Glu	Glu	Asp	Val 175	Arg
Tyr	Asn	Ile 180	Val	His	Ser	Leu	Pro 185	Pro	Asp	Ile	Asn	Asp 190	Thr	Glu	Pro
Val	Thr 195	Met	Ile	Phe	Met	Gly	Tyr 200	Gln	Gln	Ala	Glu	Asp 205	Ser	Glu	Glu
Asp 210	Lys	Lys	Phe	Leu	Thr	Gly 215	Tyr	Asp	Gly	Ile	Ile 220	His	Ala	Glu	Leu
Val	Val	Ile	Asp	Asp	Glu	Glu	Glu	Glu	Asp	Glu	Gly	Glu	Ala	Glu	Lys

225                      230                      235                      240  
 Pro Ser Tyr His Pro Ile Ala Pro His Ser Gln Val Tyr Gln Pro Ala  
                                  245                      250                      255  
 Lys Pro Thr Pro Leu Pro Arg Lys Arg Ser Glu Ala Ser Pro His Glu  
                                  260                      265                      270  
 Asn Thr Asn His Lys Ser Pro His Lys Asn Ser Ile Ser Leu Lys Glu  
                                  275                      280                      285  
 Gln Glu Glu Ser Leu Gly Ser Pro Val His His Ser Pro Phe Asp Ala  
                                  290                      295                      300  
 Gln Thr Thr Gly Asp Gly Thr Glu Asp Pro Ser Leu Thr Ala Leu Arg  
 305                                   310                      315                      320  
 Met Arg Met Ala Lys Leu Gly Lys Lys Val Ile  
                                  325                      330

<210> 191  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<400> 191  
 Leu Ser Leu Thr Ser Arg Met Glu Glu Ala Glu Leu Val Lys Gly Arg  
   1                                   5                                   10                                   15  
 Leu Gln Ala Ile Thr Asp Lys Arg Lys Ile Gln Glu Glu Ile Ser Gln  
                                  20                                   25                                   30  
 Lys Arg Leu Lys Ile Glu Glu Asp Lys Leu Lys His Gln His Leu Lys  
                                  35                                   40                                   45  
 Lys Lys Ala Leu Arg Glu Lys Trp Leu Leu Asp Gly Ile Ser Ser Gly  
                                  50                                   55                                   60  
 Lys Glu Gln Glu Glu Met Lys Lys Gln Asn Gln Gln Asp Gln His Gln  
   65                                   70                                   75                                   80  
 Ile Gln Val Leu Glu Gln Ser Ile Leu Arg Leu Glu Lys Glu Ile Gln  
                                  85                                   90                                   95  
 Asp Leu Glu Lys Ala Glu Leu Gln Ile Ser Thr Lys Glu Glu Ala Ile  
                                  100                                   105                                   110  
 Leu Lys Lys Leu Lys Ser Ile Glu Arg Thr Thr Glu Asp Ile Ile Arg  
                                  115                                   120                                   125  
 Ser Val Lys Val Glu Arg Glu Glu Arg Ala Glu Glu Ser Ile Glu Asp  
                                  130                                   135                                   140  
 Ile Tyr Ala Asn Ile Pro Asp Leu Pro Lys Ser Tyr Ile Pro Ser Arg  
   145                                   150                                   155                                   160  
 Leu Arg Lys Glu Ile Asn Glu Glu Lys Glu Asp Asp Glu Gln Asn Arg

165								170				175			
Lys	Ala	Leu	Tyr	Ala	Met	Glu	Ile	Lys	Val	Glu	Lys	Asp	Leu	Lys	Thr
180								185				190			
Gly	Glu	Ser	Thr	Val	Leu	Ser	Ser	Asn	Thr	Ser	Gly	His	Gln	Met	Thr
195								200				205			
Leu	Lys	Gly	Thr	Gly	Val	Lys	Val								
210								215							

<400>	192															
Arg	Gly	Ala	Gly	Thr	Gln	Pro	Gly	Pro	Leu	Leu	Lys	Lys	Pro	Tyr	Gln	
1				5					10					15		
Pro	Arg	Ile	Lys	Ile	Ser	Lys	Thr	Ser	Val	Asp	Gly	Asp	Pro	His	Phe	
			20					25					30			
Val	Val	Asp	Phe	Pro	Leu	Ser	Arg	Leu	Thr	Val	Cys	Phe	Asn	Ile	Asp	
		35					40					45				
Gly	Gln	Pro	Gly	Asp	Ile	Leu	Arg	Leu	Val	Ser	Asp	His	Arg	Asp	Ser	
	50					55					60					
Gly	Val	Thr	Val	Asn	Gly	Glu	Leu	Ile	Gly	Ala	Pro	Ala	Pro	Pro	Asn	
65					70					75					80	
Gly	His	Lys	Lys	Gln	Arg	Thr	Tyr	Leu	Arg	Thr	Ile	Thr	Ile	Leu	Ile	
				85					90					95		
Asn	Lys	Pro	Glu	Arg	Ser	Tyr	Leu	Glu	Ile	Thr	Pro	Ser	Arg	Val	Ile	
			100					105					110			
Leu	Asp	Gly	Gly	Asp	Arg	Leu	Val	Leu	Pro	Cys	Asn	Gln	Ser	Val	Val	
		115					120					125				
Val	Gly	Ser	Trp	Gly	Leu	Glu	Val	Ser	Val	Ser	Ala	Asn	Ala	Asn	Val	
	130					135					140					
Thr	Val	Thr	Ile	Gln	Gly	Ser	Ile	Ala	Phe	Val	Ile	Leu	Ile	His	Leu	
145					150					155					160	
Tyr	Lys	Lys	Pro	Ala	Pro	Phe	Gln	Arg	His	His	Leu	Gly	Phe	Tyr	Ile	
				165					170					175		
Ala	Asn	Ser	Glu	Gly	Leu	Ser	Ser	Asn	Cys	His	Gly	Leu	Leu	Gly	Gln	
			180					185					190			
Phe	Leu	Asn	Gln	Asp	Ala	Arg	Leu	Thr	Glu	Asp	Pro	Ala	Gly	Pro	Ser	
		195					200					205				
Gln	Asn	Leu	Thr	His	Pro	Leu	Leu	Leu	Gln	Val	Gly	Glu	Gly	Pro	Glu	

210                      215                      220

Ala Val Leu Thr Val Lys Gly His Gln Val Pro Val Val Trp Lys Gln  
 225                      230                      235                      240

Arg Lys Ile Tyr Asn Gly Glu Glu Gln Ile Asp Cys Trp Phe Ala Arg  
                     245                      250                      255

Asn Asn Ala Ala Lys Leu Ile Asp Gly Glu Tyr Lys Asp Tyr Leu Ala  
                     260                      265                      270

Ser His Pro Phe Asp Thr Gly Met Thr Leu Gly Gln Gly Met Ser Arg  
                     275                      280                      285

Glu Leu  
                     290

<210> 193  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 193

Gly His Gly Ser Tyr Arg Thr Pro Lys Arg Ser Ser Thr Asn Cys Leu  
   1                      5                      10                      15

Gly Lys Phe Trp Glu Leu Ala Asp Ala Lys Lys Lys Arg Lys Lys Val  
                     20                      25                      30

His Gln Lys Gln Lys Arg Ala Thr Ile Arg Ala Thr Glu Leu Ala Lys  
                     35                      40                      45

Gly Lys Arg His Val Gly Gly Ser Val Ser His Leu Ser Pro Gly Thr  
                     50                      55                      60

Val Lys Cys Val Ile Thr Ala Gln Val His Gly Lys Arg Gln Gln Gln  
   65                      70                      75                      80

Lys Ala Leu Cys Arg Leu Glu  
                     85

<210> 194  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 194

Gln Phe Ile Gln Gly Met Cys Ser Arg Lys Phe Ala Trp Tyr Leu Phe  
   1                      5                      10                      15

Val Lys His Leu Lys Val Pro Gln Ile Gly Phe Lys Val Pro Gly Ala  
                     20                      25                      30

Val Gly Trp His Glu Asp Pro Arg Lys Ala Thr Glu His Pro Ala Arg  
                     35                      40                      45

Leu Leu His Arg Ala Gly Glu Val Thr Phe Tyr Leu Phe Phe Arg Leu  
 50 55 60

His Pro Ile Phe His Leu Pro Phe Leu Gln Arg Ala Gln Gly Ala Ile  
 65 70 75 80

Ile Phe

<210> 195

<211> 251

<212> PRT

<213> Homo sapiens

<400> 195

Asp Asp Arg Ser His Ala Phe His His His Lys Ser Val Ile Asp Ala  
 1 5 10 15

Met Lys Gly Arg Pro Gly Gln Ser Pro Leu Phe Arg Pro Ser Gln Gly  
 20 25 30

Thr Gly Arg Val Pro Gly Thr Arg Gln Met Leu Gln Asp Ser Val Gln  
 35 40 45

Ala Ala Leu Glu Glu Val Ala Ala Ser Glu Ala Leu Leu Gly Pro Leu  
 50 55 60

Ser Pro Pro Gly Lys Ser Arg Asp Gly Asn Ala Ser Ala Gly Glu Gly  
 65 70 75 80

Cys Gln Val Phe Arg Ser Pro Pro Ser Glu Val Pro Ser Pro Pro Gly  
 85 90 95

Gln Asp Thr Pro Thr Ser Thr Phe Leu Lys Arg Arg Trp Asp Ser Gln  
 100 105 110

Val Thr Leu Leu Pro Ser Lys Lys Cys Lys Ser Gln Gln Leu Gln Glu  
 115 120 125

Ser Val Ser Gln Phe Pro Pro Ser Pro Gly Gly Arg Arg Glu Gly Pro  
 130 135 140

Trp Ser Ser Leu Gly Ala Gly Gly Pro Ser Ser His Ile Ser Ala Lys  
 145 150 155 160

Tyr Phe Pro Leu Pro Val Gln Pro Ala Cys Pro Cys Thr Ser Leu Glu  
 165 170 175

Ala Gly His Arg Pro Gly Arg Cys Val Asp Leu Gln Glu Ser Gln Gly  
 180 185 190

Val Asp His Pro Ala Asn Leu Arg Leu Ser Ser Gly Thr Ser Cys Arg  
 195 200 205

Arg Gly Leu Asn Pro Thr Pro Val Gln Val Arg Ser His Glu Ala Ser  
 210 215 220

Ser Gln Val Lys Met His Gln Thr Val Thr Trp Arg Phe Tyr Thr Phe  
 225 230 235 240

Leu Asn Phe Gln Gln Leu Gly Ala Cys Leu Leu  
 245 250

<210> 196  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 196  
 Phe Ala Lys Gly Leu Asp Arg Glu Arg Gly Asn Met Asn Leu Asp Arg  
 1 5 10 15  
 Glu Gly Asp Thr Ile Glu Arg Arg Thr Leu Pro Thr Leu Gln Ala Ser  
 20 25 30  
 Asp Leu Pro Phe Glu Gly Thr Leu Asp Gly Gly Arg Gly Arg Gly Leu  
 35 40 45  
 Gly Leu Ser Tyr Ser His Glu Leu Leu Ala Ser Thr Asp Ser Ser Asn  
 50 55 60  
 Ser Pro Pro His Lys Ile Thr Gly Thr Asn Ile Phe Asn Phe Ala Tyr  
 65 70 75 80  
 Leu Phe Leu Gly Glu Phe Pro Pro Ser Leu Phe Cys Pro Glu Thr Thr  
 85 90 95  
 Gly Lys Ala Leu His Phe Glu Arg Glu Glu Lys Leu Phe Gly Thr Thr  
 100 105 110  
 Pro Met Ile Phe Phe Phe Val Ile Leu Glu Ile Tyr Phe Phe Ile Ile  
 115 120 125  
 Leu Ile Ala Asp Val Leu Phe Ile Tyr Leu Ile Cys Ile Arg Ser Leu  
 130 135 140  
 Asn Asn Arg Lys Leu  
 145

<210> 197  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 197  
 Gly Gln Arg Cys Pro Arg Gly Thr Asp Leu Pro Glu Ala Pro Thr Leu  
 1 5 10 15  
 Pro Leu Trp Val Asn His Phe Ser Pro Gly Leu Ser Leu Arg Leu His  
 20 25 30  
 Gln Leu Val Gly Leu Gln Ala Ser Pro Pro Asp Ser Pro His Cys Trp  
 35 40 45



Ala Thr Leu Asn Leu Lys Phe His Cys Pro Ala Pro Pro Thr Pro Thr  
 50 55 60  
 Pro Lys Phe Pro Lys Glu Met Ser Lys Thr His Ala His Thr Tyr Ile  
 65 70 75 80  
 His Thr Cys Thr Cys Ala His Thr Ser Cys Val Thr Thr Gly Gln Gly  
 85 90 95  
 Asn Ala Ser Leu Arg Ile Pro Gly Pro Gly Pro Gly Val Lys Gly Cys  
 100 105 110  
 Ser Gly Thr Leu Pro Pro Asn Leu Leu Gly Gly Pro Pro Ser Val Gly  
 115 120 125  
 Ala Gly Leu Gly Val Cys Leu Asp Ser Gln Asp Leu Pro Arg Ser  
 130 135 140

<210> 198  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 198  
 Ser His Thr Met His Cys Lys Glu Thr Lys Gln Leu Tyr Arg Ser Gly  
 1 5 10 15  
 Asp Ala Ser Val Tyr Asn Thr Phe Met Ser Arg Ile Arg Ser Arg His  
 20 25 30  
 Gln Asp Leu Tyr Thr Val Ala Ala Ala Ile Gly Thr Met Ile Gln Asn  
 35 40 45  
 Ile Lys Tyr Ile Ser Ile Tyr Ile Asn Thr Gln Leu Gly Trp Gly Arg  
 50 55 60  
 Met Leu Gly Asp Leu Val Ser Pro Ala Glu Gly Leu Gly Gly Arg Glu  
 65 70 75 80  
 Gly Gly Gly Lys Gly Phe Leu Thr Phe Val Leu Asn Asp Gly Ser Glu  
 85 90 95  
 Gly Arg Arg Glu Met Gly Lys His Ser Leu His Thr Leu Met Cys Ser  
 100 105 110  
 His Thr His Ala Gln Thr Lys His Arg His Arg Arg Val Ser Asn Ser  
 115 120 125  
 Leu Thr Leu Ile Gly Lys Gln Ala Trp Asp Ile Pro Leu Gln  
 130 135 140

<210> 199  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 199

Gln Cys Arg Gly Phe Asn Leu Lys Ala Tyr Arg Asn Ala Ala Glu Ile  
 1 5 10 15  
 Val Gln Tyr Gly Val Lys Asn Asn Thr Thr Phe Leu Glu Cys Ala Pro  
 20 25 30  
 Lys Ser Pro Gln Ala Ser Ile Lys Trp Leu Leu Gln Lys Asp Lys Asp  
 35 40 45  
 Arg Arg Lys Glu Val Lys Leu Asn Glu Arg Ile Ile Ala Thr Ser Gln  
 50 55 60  
 Gly Leu Leu Ile Arg Ser Val Gln Gly Ser Asp Gln Gly Leu Tyr His  
 65 70 75 80  
 Cys Ile Ala Thr Glu Asn Ser Phe Lys Gln Thr Ile Ala Lys Ile Asn  
 85 90 95  
 Phe Lys Val Leu Asp Ser Glu Met Val Ala Val Val Thr Asp Lys Trp  
 100 105 110  
 Ser Pro Trp Thr Trp Ala Ser Ser Val Arg Ala Leu Pro Phe His Pro  
 115 120 125  
 Lys Asp Ile Met Gly Ala Phe Ser His Ser Glu Met Gln Met Ile Asn  
 130 135 140  
 Gln Tyr Cys Lys Asp Thr Arg Gln Gln His Gln Gln Gly Asp Glu Ser  
 145 150 155 160  
 Gln Lys Met Arg Gly Asp Tyr Gly Lys Leu Lys Ala Leu Ile Asn Ser  
 165 170 175  
 Arg Lys Ser Arg Asn Arg Arg Asn Gln Leu Pro Glu Ser  
 180 185

&lt;210&gt; 200

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (97)

&lt;223&gt; Any amino acid

&lt;400&gt; 200

Phe Phe Arg Glu Ala Glu Ser Pro Phe Val Ala Arg Leu Glu Cys Ser  
 1 5 10 15  
 Gly Ala Ile Ser Ala His Cys Ser Thr Val Ser Ala His Cys Ser Leu  
 20 25 30  
 Arg Pro Pro Val Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser  
 35 40 45

Trp	Asp	Tyr	Arg	Cys	Ala	Pro	Pro	Arg	Pro	Ala	Asn	Phe	Cys	Ile	Phe
	50					55					60				
Ser	Arg	Asp	Gly	Val	Ser	Leu	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Ser	Arg
	65				70					75					80
Pro	Arg	Asp	Pro	Ala	His	Leu	Gly	Leu	Pro	Lys	Cys	Trp	Asp	Tyr	Arg
				85					90					95	

Xaa

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<210> 201
<211> 354
<212> PRT
<213> Homo sapiens
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<400> 201															
Glu	Thr	Arg	Val	Lys	Thr	Ser	Leu	Glu	Leu	Leu	Arg	Thr	Gln	Leu	Glu
1				5					10					15	
Pro	Thr	Gly	Thr	Val	Gly	Asn	Thr	Ile	Met	Thr	Ser	Gln	Pro	Val	Pro
			20					25					30		
Asn	Glu	Thr	Ile	Ile	Val	Leu	Pro	Ser	Asn	Val	Ile	Asn	Phe	Ser	Gln
		35					40					45			
Ala	Glu	Lys	Pro	Glu	Pro	Thr	Asn	Gln	Gly	Gln	Asp	Ser	Leu	Lys	Lys
	50					55					60				
His	Leu	His	Ala	Glu	Ile	Lys	Val	Ile	Gly	Thr	Ile	Gln	Ile	Leu	Cys
65					70					75					80
Gly	Met	Met	Val	Leu	Ser	Leu	Gly	Ile	Ile	Leu	Ala	Ser	Ala	Ser	Phe
				85					90					95	
Ser	Pro	Asn	Phe	Thr	Gln	Val	Thr	Ser	Thr	Leu	Leu	Asn	Ser	Ala	Tyr
			100					105					110		
Pro	Phe	Ile	Gly	Pro	Phe	Phe	Phe	Ile	Ile	Ser	Gly	Ser	Leu	Ser	Ile
		115					120					125			
Ala	Thr	Glu	Lys	Arg	Leu	Thr	Lys	Leu	Leu	Val	His	Ser	Ser	Leu	Val
	130					135					140				
Gly	Ser	Ile	Leu	Ser	Ala	Leu	Ser	Ala	Leu	Val	Gly	Phe	Ile	Ile	Leu
145					150					155					160
Ser	Val	Lys	Gln	Ala	Thr	Leu	Asn	Pro	Ala	Ser	Leu	Gln	Cys	Glu	Leu
				165					170					175	
Asp	Lys	Asn	Asn	Ile	Pro	Thr	Arg	Ser	Tyr	Val	Ser	Tyr	Phe	Tyr	His
			180					185					190		
Asp	Ser	Leu	Tyr	Thr	Thr	Asp	Cys	Tyr	Thr	Ala	Lys	Ala	Ser	Leu	Ala
		195					200					205			

Gly Thr Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu  
 210 215 220  
 Ala Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe  
 225 230 235 240  
 Pro Gly Val Ser Val Leu Ala Gly Phe Thr Glu Lys Thr Pro Gly Phe  
 245 250 255  
 Glu Trp Lys Leu Thr Ala Glu Ser His Arg Pro Arg Gln Gln Gln Arg  
 260 265 270  
 Gln Gln Gln Thr Phe Gly Ile Leu Phe Ser Thr His Val Leu Ile Ile  
 275 280 285  
 His Leu Ile Ile Phe Leu Val Glu Lys Leu Gln Ile Ser Leu Phe Asn  
 290 295 300  
 Ile Tyr Ile Gln Phe Asn Lys Pro Leu Ala Ser Tyr Leu Phe Ser His  
 305 310 315 320  
 Leu Arg Tyr Phe Phe Pro Pro His Leu Ala Pro Val Pro Pro Phe Leu  
 325 330 335  
 Phe Ser Leu Cys Lys Arg Lys Tyr Leu Thr Tyr Leu Gly Pro Thr Ser  
 340 345 350

Ile Met

<210> 202  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 202  
 Glu Lys Thr Pro Gly Phe Glu Trp Lys Leu Thr Ala Glu Ser His Arg  
 1 5 10 15  
 Pro Arg Gln Gln Gln Arg Gln Gln Gln Thr Phe Gly Ile Leu Phe Ser  
 20 25 30  
 Thr His Val Leu Ile Ile His Leu Ile Ile Phe Leu Val Glu Lys Leu  
 35 40 45  
 Gln Ile Ser Leu Phe Asn Ile Tyr Ile Gln Phe Asn Lys Pro Leu Ala  
 50 55 60  
 Ser Tyr Leu Phe Ser His Leu Arg Tyr Phe Phe Pro Pro His Leu Ala  
 65 70 75 80  
 Pro Val Pro Pro Phe Leu Phe Ser Leu Cys Lys Arg Lys Tyr Leu Thr  
 85 90 95  
 Tyr Leu Gly Pro Thr Ser Ile Met  
 100

<210> 203  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 203  
 His Lys Lys Asn Phe Trp Gln Ile Phe Ile Gln Ile Ala Cys Leu Gln  
   1                  5                  10                  15  
 Trp Gln Ile Ser Gln His Phe Ser Leu Phe Cys Leu Cys Leu Ser Leu  
           20                  25                  30  
 Cys Ile Phe Leu Glu Arg Lys Leu Asn Ala Phe Asn Val Leu Ile Ile  
           35                  40                  45  
 Thr Leu Leu Lys Leu Asp Pro Asn Met Leu Asn Ile Ser Ser Cys Lys  
       50                  55                  60  
 Gly Arg Arg Gly Arg Glu Glu Gln Gly Gln Gly Gly Glu Glu Lys Asn  
       65                  70                  75                  80  
 Thr Ser Gly Glu Arg Thr Ser Asn Leu Gln Glu Ala Tyr  
                   85                  90

<210> 204  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 204  
 Arg Pro Lys Pro Gly His Pro Leu Tyr Ser Lys Tyr Met Arg Gly Asp  
   1                  5                  10                  15  
 Val Leu Val Met Leu Lys Gln Thr Glu Asn Asn Tyr Leu Glu Cys Gln  
           20                  25                  30  
 Lys Gly Glu Asp Thr Gly Arg Val His Leu Ser Gln Met Lys Ile Ile  
       35                  40                  45  
 Thr Pro Leu Asp Glu His Leu Arg Ser Arg Pro Asn Asp Pro Ser His  
       50                  55                  60  
 Ala Gln Lys Pro Val Asp Ser Gly Ala Pro His Ala Val Val Leu His  
       65                  70                  75                  80  
 Asp Phe Pro Ala Glu Gln Val Asp Asp Leu Asn Leu Thr Ser Gly Glu  
           85                  90                  95  
 Ile Gly Leu Ser Ser Gly Glu Asp Arg Tyr Arg Leu Val Gln Arg Glu  
       100                  105                  110

Leu

&lt;210&gt; 205

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 205

Thr Ser Leu Leu Glu Lys Leu Val Tyr Leu Leu Glu Lys Ile Asp Thr  
 1 5 10 15

Asp Trp Tyr Arg Gly Asn Cys Arg Asn Gln Ile Gly Ile Phe Pro Ala  
 20 25 30

Asn Tyr Val Lys Val Ile Ile Asp Ile Pro Glu Gly Gly Asn Gly Lys  
 35 40 45

Arg Glu Cys Val Ser Ser His Cys Val Lys Gly Ser Arg Cys Val Ala  
 50 55 60

Arg Phe Glu Tyr Ile Gly Glu Gln Lys Asp Glu Leu Ser Phe Ser Glu  
 65 70 75 80

Gly Glu Ile Ile Ile Leu Lys Glu Tyr Val Asn Glu Glu Trp Ala Arg  
 85 90 95

Gly Glu Val Arg Gly Arg Thr Gly Ile Phe Pro Leu Asn Phe Val Glu  
 100 105 110

Pro Val Glu Asp Tyr Pro Thr Ser Gly Ala Asn Val Leu Ser Thr Lys  
 115 120 125

Val Pro Leu Lys Thr Lys Lys Glu Asp Ser Gly Ser Asn Ser Gln Val  
 130 135 140

Asn Ser Leu Pro Ala Glu Trp Cys Glu Ala Leu His Ser Phe Thr Ala  
 145 150 155 160

Glu Thr Ser Asp Asp Leu Ser Phe Lys Arg Gly Asp Arg Ile Gln Ile  
 165 170 175

Leu Glu Arg Leu Asp Ser Asp Trp Cys Arg Gly Arg Leu Gln Asp Arg  
 180 185 190

Glu Gly Ile Phe Pro Ala Val Phe Val Arg Pro Cys Pro Ala Glu Ala  
 195 200 205

Lys Ser Met Leu Ala Ile Val Pro Lys Gly Gln Glu Gly Gln Ser Leu  
 210 215 220

Ile

225

&lt;210&gt; 206

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 206

Cys Ile Gly Phe Ser Ser Gly Phe Asp Lys Val Lys Arg Ile Val Thr  
 1 5 10 15  
 Arg Val Thr Gln Thr Cys Gln Leu Ser Glu Ser Leu Val Val Lys Pro  
 20 25 30  
 Glu Leu Gly Lys Leu Ser Leu Arg Arg Leu Lys Glu Arg Ala Gln Val  
 35 40 45  
 Gly Ile Cys Val Ile Thr Val Leu Leu Pro Arg His Gly Val Asp Asn  
 50 55 60  
 Lys Ile Pro Leu Gln Ser Thr Gly Val Ser Val Arg Leu Val Leu Gln  
 65 70 75 80  
 Lys Ala Ala His Trp Glu Trp Gly Gly Ala Cys Gly Lys Pro Asp Cys  
 85 90 95  
 Gly Glu Lys Leu Gly Glu Asn Gly Ser  
 100 105

<210> 207  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 207  
 Leu Cys Gly Ala Ala Ala Ser Cys Met Met Leu Gly Ser Leu Ala Pro  
 1 5 10 15  
 Asp Pro Gly Ser Arg Arg His Ser Gly Gln Ala Ala Leu Arg Pro Arg  
 20 25 30  
 Arg Tyr Pro Thr Leu Trp Asp Arg Cys Arg Lys Arg Trp Leu Arg Pro  
 35 40 45  
 Ile Phe Thr Gln Leu Leu Ala Ala Val Trp Leu Thr Thr Arg Ser Ser  
 50 55 60  
 Pro Phe Pro Val Ser Arg Phe Leu Gln His Gln Ala Asn Thr Tyr Thr  
 65 70 75 80  
 Ser Ala Leu

<210> 208  
 <211> 581  
 <212> PRT  
 <213> Homo sapiens

<400> 208  
 Tyr Phe Cys Met Met Thr Glu Ala Glu Gln Asp Lys Trp Gln Ala Val  
 1 5 10 15  
 Leu Gln Asp Cys Ile Arg His Cys Asn Asn Gly Ile Pro Glu Asp Ser  
 20 25 30

Lys	Val	Glu	Gly	Pro	Ala	Phe	Thr	Asp	Ala	Ile	Arg	Met	Tyr	Arg	Gln
35						40						45			
Ser	Lys	Glu	Leu	Tyr	Gly	Thr	Trp	Glu	Met	Leu	Cys	Gly	Asn	Glu	Val
50						55				60					
Gln	Ile	Leu	Ser	Asn	Leu	Val	Met	Glu	Glu	Leu	Gly	Pro	Glu	Leu	Lys
65				70						75				80	
Ala	Glu	Leu	Gly	Pro	Arg	Leu	Lys	Gly	Lys	Pro	Gln	Glu	Arg	Gln	Arg
				85				90						95	
Gln	Trp	Ile	Gln	Ile	Ser	Asp	Ala	Val	Tyr	His	Met	Val	Tyr	Glu	Gln
		100						105				110			
Ala	Lys	Ala	Arg	Phe	Glu	Glu	Val	Leu	Ser	Lys	Val	Gln	Gln	Val	Gln
115						120						125			
Pro	Ala	Met	Gln	Ala	Val	Ile	Arg	Thr	Asp	Met	Asp	Gln	Ile	Ile	Thr
130						135				140					
Ser	Lys	Glu	His	Leu	Ala	Ser	Lys	Ile	Arg	Ala	Phe	Ile	Leu	Pro	Lys
145				150						155				160	
Ala	Glu	Val	Cys	Val	Arg	Asn	His	Val	Gln	Pro	Tyr	Ile	Pro	Ser	Ile
				165				170						175	
Leu	Glu	Ala	Leu	Met	Val	Pro	Thr	Ser	Gln	Gly	Phe	Thr	Glu	Val	Arg
		180						185				190			
Asp	Val	Phe	Phe	Lys	Glu	Val	Thr	Asp	Met	Asn	Leu	Asn	Val	Ile	Asn
195						200						205			
Glu	Gly	Gly	Ile	Asp	Lys	Leu	Gly	Glu	Tyr	Met	Glu	Lys	Leu	Ser	Arg
210						215				220					
Leu	Ala	Tyr	His	Pro	Leu	Lys	Met	Gln	Ser	Cys	Tyr	Glu	Lys	Met	Glu
225				230						235				240	
Ser	Leu	Arg	Leu	Asp	Gly	Leu	Gln	Gln	Arg	Phe	Asp	Val	Ser	Ser	Thr
				245				250						255	
Ser	Val	Phe	Lys	Gln	Arg	Ala	Gln	Ile	His	Met	Arg	Glu	Gln	Met	Asp
		260						265				270			
Asn	Ala	Val	Tyr	Thr	Phe	Glu	Thr	Leu	Leu	His	Gln	Glu	Leu	Gly	Lys
275						280						285			
Gly	Pro	Thr	Lys	Glu	Glu	Leu	Cys	Lys	Ser	Ile	Gln	Arg	Val	Leu	Glu
290						295				300					
Arg	Val	Leu	Lys	Lys	Tyr	Asp	Tyr	Asp	Ser	Ser	Ser	Val	Arg	Lys	Arg
305				310						315				320	
Phe	Phe	Arg	Glu	Ala	Leu	Leu	Gln	Ile	Ser	Ile	Pro	Phe	Leu	Leu	Lys
				325				330						335	



Lys Leu Ala Pro Thr Cys Lys Ser Glu Leu Pro Arg Phe Gln Glu Leu  
 340 345 350  
 Ile Phe Glu Asp Phe Ala Arg Phe Ile Leu Val Glu Asn Thr Tyr Glu  
 355 360 365  
 Glu Val Val Leu Gln Thr Val Met Lys Asp Ile Leu Gln Ala Val Lys  
 370 375 380  
 Glu Ala Ala Val Gln Arg Lys His Asn Leu Tyr Arg Asp Ser Met Val  
 385 390 395 400  
 Met His Asn Ser Asp Pro Asn Leu His Leu Leu Ala Glu Gly Ala Pro  
 405 410 415  
 Ile Asp Trp Gly Glu Glu Tyr Ser Asn Ser Gly Gly Gly Gly Ser Pro  
 420 425 430  
 Ala Pro Ala Pro Arg Ser Gln Pro Pro Ser Arg Lys Ser Asp Gly Ala  
 435 440 445  
 Pro Ser Arg Trp Ser Leu Trp Ser Arg Met Arg Arg Trp Gly Cys Pro  
 450 455 460  
 Leu Arg Leu Ala Leu Ser His His His Leu Arg Pro Arg Thr Val Ser  
 465 470 475 480  
 Leu Arg Ser Glu Ala Cys Trp Pro Lys Val Cys Gly Leu Arg Ala Pro  
 485 490 495  
 His Gln Pro Ala Pro Cys Ser Thr Gly Pro Pro Leu Gly Arg Val Pro  
 500 505 510  
 Ser Leu Arg Pro Pro Pro Arg Pro Pro Arg Arg Leu Pro His Pro Ser  
 515 520 525  
 Ser Ile Ser Cys Leu Glu Arg Leu Trp Thr Leu Gly Pro Pro Ser Pro  
 530 535 540  
 Ala Thr Arg Arg Leu Glu Ser Arg Cys Pro Ala Pro Ala Ala Thr Pro  
 545 550 555 560  
 Pro Ser Thr Pro Pro Pro Arg Thr Val Gln Gly Cys Arg Leu Ser Ser  
 565 570 575  
 Arg Pro Val Gly Pro  
 580

&lt;210&gt; 209

&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 209

Pro Gln Arg Ala Ala Pro Pro Pro His Pro Gly Pro Gln Arg Pro Pro  
 1 5 10 15

Ala	Trp	Arg	Ala	Val	Ala	Phe	Pro	Arg	Gly	Trp	Leu	Thr	Pro	Gly	Cys
			20					25					30		
Trp	Gly	Trp	Ala	Ala	Ala	Pro	Ala	Ala	Val	Ala	Val	Leu	Leu	Ala	Pro
		35					40					45			
Val	Asp	Gly	Gly	Ala	Leu	Gly	Gln	Gln	Val	Gln	Val	Gly	Val	Ala	Val
	50					55					60				
Val	His	Asp	His	Ala	Val	Pro	Val	Glu	Val	Val	Leu	Pro	Leu	His	Arg
	65				70					75					80
Gly	Leu	Leu	His	Ser	Leu	Gln	Asp	Val	Leu	His	Asp	Gly	Leu	Gln	His
				85					90					95	
His	Leu	Leu	Val	Arg	Val	Phe	His	Gln	Asp	Glu	Pro	Gly	Lys	Val	Leu
			100					105					110		
Glu	Asp	Gln	Leu	Leu	Glu	Pro	Gly	Gln	Leu	Arg	Leu	Ala	Gly	Arg	Gly
	115						120					125			
Gln	Leu	Leu	Glu	Gln	Glu	Arg	Asp	Ala	Asp	Leu	Gln	Gln	Arg	Leu	Pro
	130					135					140				
Glu	Glu	Pro	Leu	Pro	His	Arg	Ala	Ala	Val	Val	Val	Val	Phe	Leu	Gln
	145				150					155					160
His	Pro	Leu	Gln	Asp	Pro	Leu	Asp	Gly	Leu	Ala	Gln	Leu	Leu	Leu	Gly
			165						170					175	
Gly	Pro	Leu	Pro	Gln	Leu	Leu	Val	Gln	Glu	Gly	Leu	Glu	Arg	Ile	His
			180					185					190		
Gly	Ile	Val	His	Leu	Leu	Pro	His	Val	Asp	Leu	Gly	Ser	Leu	Leu	Glu
	195						200					205			
His	Gly	Arg	Ala	Gly	His	Ile	Lys	Ser	Leu	Leu	Gln	Pro	Val	Gln	Ser
	210					215					220				
Gln	Arg	Leu	His	Leu	Leu	Ile	Ala	Ala	Leu	His	Leu	Gln	Gly	Val	Val
	225				230					235					240
Arg	Gln	Pro	Gly	Gln	Leu	Leu	His	Val	Leu	Ala	Gln	Leu	Val	Asn	Ala
				245					250					255	
Ala	Leu	Val	Asp	Asp	Val	Gln	Val	His	Val	Arg	Asp	Leu	Leu	Glu	Glu
			260					265					270		
Asp	Ile	Ser	His	Leu	Ser	Glu	Ala	Leu	Ala	Gly	Gly	Asp	His	Gln	Gly
	275						280					285			
Leu	Gln	Asp	Gly	Trp	Asp	Val	Gly	Leu	Asp	Met	Val	Pro	His	Ala	His
	290					295					300				
Leu	Cys	Leu	Gly	Glu	Asp	Glu	Gly	Ser	Asp	Leu	Ala	Gly	Lys	Val	Leu
	305				310					315					320
Leu	Gly	Gly	Asp	Asn	Leu	Val	His	Val	Ser	Ser	Asp	Asp	Gly	Leu	His

	325		330		335
Gly Arg Leu His Leu Leu His Leu Gly Gln His Leu Leu Glu Ala Arg	340		345		350
Leu Gly Leu Leu Val His His Val Val His Gly Val Arg Asp Leu Asp	355		360		365
Pro Leu Pro Leu Pro Leu Leu Arg Phe Pro Leu Gln Pro Arg Ala Glu	370		375		380
Leu Cys Leu Gln Leu Arg Ala Gln Leu Leu His His Gln Val Ala Gln	385		390		395
Asp Leu His Leu Val Pro Thr Gln His Leu Pro Gly Ala Val Gln Leu	405		410		415
Leu Gly Leu Ser Val His Ala Asp Gly Ile Cys Glu Arg Arg Ala Leu	420		425		430
Tyr Leu Gly Val Leu Arg Asp Ser Ile Val Ala Val Pro Asp Ala Val	435		440		445
Leu Gln His Ser Leu Pro Leu Val Leu Leu Gly Phe Cys His His Ala	450		455		460
Glu Val	465				

&lt;210&gt; 210

&lt;211&gt; 29

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Consensus  
sequence

&lt;400&gt; 210

atgtcctagc ctcaagttat cagatgcaa